

KAO BRANDS COMPANY

U S A

2535 spring grove avenue
 Cincinnati, OH 45214
 513.421.1400
 www.kaobrands.com

June 16, 2011

VIA FEDERAL EXPRESS

Mr. Carl Brickner
 Case Developer, Mail Stop SFD-7-5
 U.S. Environmental Protection Agency, Region IX
 75 Hawthorne Street
 San Francisco, CA 94105
 Brickner.Carl@epa.gov

Re: Request for Information Pursuant to CERCLA Section 104(e);
 San Fernando Valley Area 2 Superfund Site – Glendale Chromium Operable
 Unit; Former Andrew Jergens Facility, 99 West Verdugo Ave., Burbank, CA
 91502

Dear Mr. Brickner:

This letter and the documents submitted herewith are the response of the Kao Brands Company ("Kao Brands") to a letter, dated April 7, 2011, to Mr. William Gentner, President/CEO of Kao Brands located at 2535 Spring Grove Avenue, Cincinnati, Ohio 45214. On April 19, 2011, you kindly agreed to grant a thirty (30) day extension of time until June 13, 2011 for Kao Brands to submit this response. After finding newly discovered documents, on June 13, 2011, you again kindly agreed to grant a seven (7) extension of time until June 20, 2011 for Kao Brands to submit this response.

On May 22, 1991 Kao Brands sent a 104(e) response letter ("1991 Letter") to a letter from Mr. Jerry Clifford, EPA Region IX. As you requested, Kao Brands will refer EPA to the 1991 Letter where it is appropriate.

Please note that any further information or communication with respect to this matter should be directed to A. Christian Worrell, Graydon Head & Ritchey LLP, 7759 University Drive, Suite A, West Chester, Ohio 45069.

**KAO BRANDS' RESPONSES TO THE UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY INFORMATION REQUESTS**

1. Identify those individuals who provided the knowledge, information and documents used to prepare the response to these questions. Include the full name, current title and duties, as well as past titles and duties, current address and telephone number, and tenure for each individual providing an answer for any of these questions.

Response: Dennis Ward
Global Corporate Counsel
Kao Brands Company
2535 Spring Grove Avenue
Cincinnati, Ohio 45214
Phone: 513-455-5348
Fax: 512-263-7348
dennis.ward@kaobrand.com

Gary Manning
Kao Brands Company
2535 Spring Grove Avenue
Cincinnati, Ohio 45214
Phone: 513-455-7917
gary.manning@kaobrand.com

2. Please describe the current and former relationship between Kao Brands Company, The Andrew Jergens Company, and Andrew Jergens Co. ("Jergens"). Please provide the dates and nature of any mergers, acquisitions, assumption of assets, or agreements regarding historical or future liabilities. Also include any contracts, leases or partnerships between the parties listed above and the dates within which these relationships existed. Please provide any documents supporting this description.

Response: On May 25, 1988, the Kao Corporation of Japan purchased the Andrew Jergens Company from American Brands, Inc. In 2004, the Andrew Jergens Company was renamed Kao Brands Company. However, in 2004, there was no change of ownership; it was merely a name change for business purposes.

3. Please identify the owner(s) of the property 99 West Verdugo Avenue, Burbank, California during the period of time that Jergens operated at the Facility.

Response: The Andrews Jergens Company purchased the site at 99 West Verdugo Avenue, Burbank, California, from Carbasemo Products, a maker of laundry soap, in 1921. The Burbank facility ceased operations in November

1992. For further information, please refer to the 1991 Letter and documents responsive to Request No. 3.

4. Please describe, in detail and in narrative fashion, the cooling systems and cooling towers used at the Facility, and changes to the cooling systems and cooling towers since the beginning of Jergens' operations at the Facility. Your response must include the following for all of the cooling systems and towers used over time at the Facility:

Response: After performing a diligent search of company records and directing inquiries to company personnel most likely to have relevant information, Kao Brands has discovered no information responsive to this request or its subparts a-k and m-q.

- a. Provide the dates that the cooling systems were in operation at the Facility;
- b. Provide the dates that cooling towers were in operation at the Facility;
- c. State the year(s) that cooling towers were constructed, and identify the materials of which the towers were constructed (e.g., metal, wood, etc.);
- d. Identify the types of cooling systems and state including whether the cooling systems were "open recirculating cooling systems" or a "closed recirculating cooling system";
- e. Identify the substances which were used in the cooling systems and cooling towers, and mixed with water circulated within the cooling systems and cooling towers, including but not limited to corrosion inhibitors, and provide Material Safety Data Sheets ("MSDSs") for all such substances;
- f. State whether or not chromium and substances containing chromium were ever added to water used in Jergens' cooling systems and cooling towers and identify the names and composition of those substances.
- g. Describe how the substances identified in 4.e and 4.f., above, were added and used in the cooling systems and cooling towers, and identify the locations where such substances were stored at the Facility;
- h. State the quantities and years that the substances identified in 4.e and 4.f., above, were stored and used at the Facility;
- i. If Jergens was required to report the type and quantity of substances identified in 4.e and 4.f., above, to any federal or state agency or entity, provide copies of all such reports;
- j. State whether or not hexavalent chromium or total chromium was ever *detected* in water used in Jergens' cooling systems and cooling towers regardless of your response to question 4.f, above;
- k. If water used in Jergens' cooling system and cooling towers was ever tested for hexavalent chromium or chromium please provide all documentation related to the tests and the results of the tests, including correspondence;
- l. Provide all maps, drawings, diagrams, plans, blueprints, photographs, and

flow charts related to past and current cooling systems, cooling towers and associated piping showing the location of all cooling towers, percolation pits, dry wells, sumps, underground structures, piping and other wells that were *ever* connected to the cooling systems including but not limited to cooling water blowdown from cooling towers;

Response: Copies of a facility site plan for the Andrew Jergens Co. at 99 West Verdugo, Burbank, CA, dated February 6, 1991, are enclosed. For further information, please refer to the 1991 Letter and drawings of the Facility responsive to Request Nos. 6(b). Specifically, refer to Drawing No. 1814-B and Drawing No. 1825-C.

- m. Describe the waste streams generated by operation of the cooling systems and cooling towers;
 - n. State the volume and frequency of the cooling water blowdown discharged from the cooling system, and describe the waste storage methods for the blowdown;
 - o. Describe how and where cooling tower purge steam was released from the cooling system;
 - p. Provide copies of all analyses for chromium performed on the water *prior* to use in the cooling systems and cooling towers, *during* use in the cooling systems and cooling towers, and *discharged* from the cooling system and cooling towers; and
 - q. Provide copies of all analyses for chromium in air emitted from the cooling systems and cooling towers.
5. If chromium or any substance containing chromium, including but not limited to potassium dichromate and paint, was utilized in any operations at the Facility, *other than the cooling systems and cooling towers*, since the beginning of Jergens' operations at the Facility, provide a complete description of those operations. Your response to this question must include the following for each operation identified and described:

Response: After performing a diligent search of company records and directing inquiries to company personnel most likely to have relevant information, Kao Brands has discovered no information responsive to this request.

- a. Identify the substance containing chromium and provide all MSDS;

Response: After performing a diligent search of company records and directing inquiries to company personnel most likely to have relevant information, Kao Brands has discovered no information responsive to this request.

- b. State the volume of chromium substances containing chromium used per month for each operation identified;

Response: After performing a diligent search of company records and directing inquiries to company personnel most likely to have relevant information, Kao Brands has discovered no information responsive to this request.

- c. State the periods of time during which chromium substances containing chromium were used for each operation identified;

Response: After performing a diligent search of company records and directing inquiries to company personnel most likely to have relevant information, Kao Brands has discovered no information responsive to this request.

- d. Describe how chromium or chromium-related substances were stored and disposed of for each operation identified;

Response: After performing a diligent search of company records and directing inquiries to company personnel most likely to have relevant information, Kao Brands has discovered no information responsive to this request.

- e. Identify the building name or number and location of the buildings that contained each operation identified;

Response: After performing a diligent search of company records and directing inquiries to company personnel most likely to have relevant information, Kao Brands has discovered no information responsive to this request.

- f. Provide all maps, drawings, diagrams, plans, blueprints, as-builts, photographs, and flow charts related to the building, the operation, and all piping that was connected to the building;

Response: After performing a diligent search of company records and directing inquiries to company personnel, Kao Brands has no information on whether chromium was used in any of the buildings at the Facility. However, we are providing all maps and drawings of the Facility that are currently in our possession. Please refer to the documents produced in response to request 4(l). For further information, please refer to the 1991 Letter and drawings of the Facility responsive to Request Nos. 2, 6(a), and 6(b).

- g. Provide all reports of soil, groundwater, waste water, stormdrain water, and air emission testing at and beneath the building containing the operation identified and all related correspondence, including internal Jergens correspondence, related to the testing and the results; and

Response: A copy of the Andrew Jergens Company Burbank Plant Well Investigation Program (File No. 104.1681) is attached. For further information, please refer to the 1991 Letter and the documents responsive to Request No 7 and No. 11.

- h. Describe how waste-water related to these operations was disposed of during the entire period of time the operation occurred.

Response: After performing a diligent search of company records and directing inquiries to company personnel most likely to have relevant information, Kao Brands has discovered no information responsive to this request.

6. Please state the source of water used in Jergens' cooling systems and cooling towers since the beginning of Jergens' operations at the Facility.

Response: After performing a diligent search of company records and directing inquiries to company personnel most likely to have relevant information, Kao Brands has discovered that all water used at the facility was obtained from the City of Burbank.

7. Please state where water used in Jergens' cooling systems and cooling towers was discharged since the beginning of Jergens' operations at the Facility.

Response: After performing a diligent search of company records and directing inquiries to company personnel most likely to have relevant information, Kao Brands has discovered that water was discharged to a sewer system.

8. If groundwater was used in Jergens' cooling system and cooling towers, please provide all sampling and testing reports and analytical data from testing of groundwater prior to use in Jergens' cooling system and cooling towers since the beginning of Jergens' operations at the Facility.

Response: After performing a diligent search of company records and directing inquiries to company personnel most likely to have relevant information, Kao Brands has discovered no information indicating that groundwater was used in the cooling system and cooling towers.

9. State whether there have been any releases, or suspected releases, of chromium and substances containing chromium, at and from the Facility and provide any documents describing, evidencing or otherwise documenting such releases.

Response: After performing a diligent search of company records and directing inquiries to company personnel most likely to have relevant information, Kao Brands has discovered no information responsive to this request.

10. Identify and provide copies of any documentation of any hazardous waste-related tax paid by Jergens related to any operation from which waste containing chromium was sent to an off-site disposal Facility, and identify the dates upon which you paid such taxes, including but not limited to a description of whether

such tax(es) were local, state or federal and the specific regulations under which you were required to pay the tax(es).

Response: After performing a diligent search of company records and directing inquiries to company personnel most likely to have relevant information, Kao Brands has discovered no information responsive to this request.

11. List and provide copies of all Federal, State, County, City and all other local permits, licenses, and/or registrations and their respective permit numbers issued concerning the Facility and the storage, use, and discharge of substances containing chromium, including but not limited to permits and correspondence related to Publicly Owned Treatment Works (POTW), Los Angeles County permits and licenses, and California Air Quality Management District permits and licenses. Your response must include all compliance testing results for all waste streams exiting the Facility.

Response: Kao Brands is interpreting this request to mean permits, licenses, and/or registrations concerning the Facility and chromium or substances containing chromium. Kao Brands has discovered no information or permits, licenses, and/or registrations relating to chromium or substances containing chromium. However, it believed that the Facility had the following permits:

- Air ID# 020652
- General Industrial Activities Storm Water Permit
- UST Permit – Issued 7/28/1993 – No. 19007011586
- EPA ID: CAD982016156
- Hazardous Materials Underground Storage Permit – Provisional Permit No. 3144

12. List and provide copies of all documents related to warnings, fines, penalties, notices of violation, and notices of non-compliance sent to Jergens by a Federal, State, County, or City agency or office, for the release, potential release, or perceived release of chromium or substances containing chromium.

Response: After performing a diligent search of company records and directing inquiries to company personnel most likely to have relevant information, Kao Brands has discovered no information responsive to this request.

13. State whether Jergens has or had a permit or permits issued under the Resource, Conservation and Recovery Act (“RCRA”) for the Facility of Facilities. If the answer is “yes,” identify all such permits, including but not limited to the dates of issuance and a general description of the process permitted. Provide copies of all such permits.

Response: Yes. For further information, please see the 1991 Letter and documents responsive to Request No. 1.

14. Provide the names, addresses and telephone numbers of any individuals, including former and current employees, who may be knowledgeable of Jergens' operations with respect to chromium, *and other* hazardous substances, waste or pollutant or contaminant handling, storage and disposal practices at the Facility since the beginning of Jergens operations at the Facility.

Response: The following is a list of last known addresses of individual who may be knowledgeable:

Jerry Rayburn

FOIA ex 6 Personal Privacy

Allen Haig

FOIA ex 6 Personal Privacy

W.R. Somerville

FOIA ex 6 Personal Privacy

15. Provide the names, addresses and telephone numbers of all individuals, including former and current employees, who may be knowledgeable of the cooling system(s) and cooling towers used at the Facility and all changes to the cooling systems over the period of Jergens' operations at the Facility. Your response must include personnel that regularly maintained and repaired cooling systems at the Facility since the beginning of Jergens' operations at the Facility.

Response: The following is a list of last known addresses of individual who may be knowledgeable:

Jerry Rayburn

FOIA ex 6 Personal Privacy

Allen Haig

FOIA ex 6 Personal Privacy

W.R. Somerville

FOIA ex 6 Personal Privacy

16. Provide the names, addresses and telephone numbers of all individuals, including former and current employees, who may be knowledgeable of the industrial waste water piping systems, including percolations pits, used since the beginning

Jergens' operations at the Facility. Your response must include personnel that regularly maintained and repaired this system.

Response: The following is a list of last known addresses of individual who may be knowledgeable:

Jerry Rayburn

FOIA ex 6 Personal Privacy

[REDACTED]

Allen Haig

FOIA ex 6 Personal Privacy

[REDACTED]

W.R. Somerville

FOIA ex 6 Personal Privacy

[REDACTED]

This concludes the response of Kao Brands to the foregoing request.

Sincerely,

KAO BRANDS COMPANY

By:

Name:

Title:

John E. Noser
JOHN E. NOSER
VICE PRESIDENT AND GENERAL MANAGER,
UNITED STATES

Enclosures

3189805.1



THE ANDREW JERGENS COMPANY • 99 W. VERDUGO AVENUE • BURBANK, CALIFORNIA 91502

May 7, 1990

David A. Bacharowski
California Regional Water Quality Board
Los Angeles Region
101 Centre Plaza Drive
Monterey Park, CA 91754-2156

Dear Mr. Bacharowski:

Enclosed are four copies of The Andrew Jergens Company proposed workplan as requested in your letter of April 12, 1990 (FILE NO. 104.1681).

If the plan is approved, we will probably use Active Leak Testing to conduct the required work.

If there any questions, please contact myself or Bob Somerville.

Sincerely,

Allen W. Haig
Allen W. Haig

Environmental & Safety Engineer

Diesel tank testing - monitor well report included



THE ANDREW JERGENS COMPANY • 99 W. VERDUGO AVENUE • BURBANK, CALIFORNIA 91502

May 07, 1990

W. Harding Drane, Jr.
Potter, Anderson, & Corroon
Delaware Trust Building
P.O. Box 951
Wilmington, Delaware 19899

Dear Harding:

On February 15th, we were inspected by two inspectors from the California Regional Water Quality Board. Their enclosed letter of April 12th for a well investigation program (file no. 104.1681) is a result from this general inspection.

They are primarily concerned that we have no potential ground water pollution. I have already sent them our information on the ethyl alcohol tank leak workplan.

The proposed workplan is enclosed and seems to answer their requirements.

I will keep you informed as this work proceeds.

Concerning the ethyl alcohol work, the tank has been made and we are now waiting for the tank sensors. Since we seem to have all the necessary approvals, this work should begin within a month or two.

Let me know if you have any questions or comments on this.

Yours truly,


Allen W. Haig
Environmental & Safety Engineer

Andrew Jergens Company
Burbank Plant

WELL INVESTIGATION PROGRAM (FILE NO. 104.1681)

PROPOSED WORK PLAN

May 7, 1990

CONTENTS

Work Plan

Appendix 1: Boring Protocol & Test Methods

Appendix 2: Diesel Tank Site Investigation

Appendix 3: Site Drawings

Appendix 4: Waste Water Test Results

WORK PLAN

ANDREW JERGENS COMPANY
99 W. VERDUGO AVE.
BURBANK, CA 91502

WELL INVESTIGATION PROGRAM (File No. 104.1681) WORKPLAN

SITE INFORMATION:

The Andrew Jergens Company purchased this site from Carbassemo Products, a maker of laundry soap, in 1921.

The Andrew Jergens Company has always been in the business of manufacturing bar soap, lotions, and toiletries for the consumer market.

Storage tanks hold ethyl alcohol, tallow, cocoanut oil, brine, 50% NaOH, mineral oil, glycerine, ammonium lauryl sulfate, sodium C14-16 olefin sulfonate, diethanolamide, and diesel fuel. These materials are pumped to designated locations.

All other chemicals are received in drums, bags, or cartons and are stored inside the plant.

We only use safety solvent in small quantities. The waste solvent is stored in an assigned and labelled drum and is taken by a hazardous materials firm to be incinerated.

FACILITY MAP & BORING LOCATIONS:

A scaled facility map (Appendix 3) of three pages is enclosed indicating:

- The location of the three underground diesel oil tanks,
- The location of the underground ethyl alcohol tank,
- The location of two proposed wells at the clarifier(per your request),
- The location of two proposed wells at old boiler sump area (per your request),
- The location of one proposed well at the gasoline drum area (per your request).
- The dates, in parentheses, indicate when the buildings were built.

WORK PLAN:

Per your work plan request of April 12, 1990, the following steps will be taken on approval:

- A. The reports on the tank testing and boring results for the three underground diesel oil tanks are enclosed (see: Diesel Tank Site Investigation in Appendix 2). As I showed you on your inspection, we have installed and operate a LeakSensor II vapor monitoring system.

- B. As stated in your letter of April 12, 1990, we have sent you the reports on the **ethyl alcohol tank** investigation and tank replacement. We or our contractor, Active Leak Testing, will keep you informed of the progress and results of this project.
- C. The **test borings** will be contracted to Active Leak Testing and conducted according to the Board's Site Soils and Geology requirements (see: Soil Boring Protocol section, Appendix 1).

From the **Industrial Waste Clarifier**, samples will be taken, analyzed, and the results sent to you. Two borings and soil samples will be conducted at this location (see: Plan A-1 in Appendix 3). The clarifier will also be inspected with an inspector present. Enclosed in this report are copies of our analytical test results from the past year of our **waste water** taken quarterly for a 24 hour sample period and submitted to the City of Burbank (Appendix 4). Also included is a complete 1977 waste water analysis.

Two borings at the **Old Boiler Sump** area will also be taken and the samples analyzed. EPA Method 8080 will be used for detecting PCB's. (See: Plan A-1, Appendix 3, for proposed boring locations). The final locations will be determined with the Regional Board. The active water discharge pipes to this sump will then be re-located and the sump taken out of service.

At the **Gasoline Drum** area, one boring will be made down to 15 feet and the samples at the 5 foot intervals will be analyzed by EPA Method 8015 modified. The proposed boring location is indicated on Plan C-1 (Appendix 3).

D. **North Tank Farm Area;**

The history of this tank farm area is based on incomplete files and drawings. The references below correspond to internal company documents.

The first record of this area shows that 5 large tanks are set on individual concrete pads with no dike (ref: Drw 0015-13) in 1941. The tanks were probably installed in 1940, with three of the tanks containing tallow (ref: Equip. Inv. List). The fourth tank probably contained tallow, and the last tank was probably for crude glycerine. These are the usual materials used in making bar soap. A steam condensate line is indicated going into the sewer line in bldg. 10 (see Plan B-1) that connects to the main sewer (ref: Drw 0052-0). See Plan C-1 for #1 tank farm location where these tanks were installed.

A coconut oil tank was purchased in 1942 (ref: Equip. Inv. List) and was most likely added to this tank area.

In 1949, there were nine tanks in this tank farm that was still undiked, with each tank on a concrete pad. The contents of each were: 4 tallow tanks (24,000 gal. each)
1 cocoanut oil tank (24,000 gal.)
1 glycerine tank (approx. 18,000 gal.)
1 mineral oil tank (16,000 gal.)
2 tallow tanks (8,000 gal. each)
(ref: Report #80-215, Drw 0120).

In 1954, a 12,000 gal. storage tank for ammonium lauryl sulfate was installed in the #1 tank farm (ref: drw 0122).

Between 1954 and 1960, the 13,200 gal. 50% NaOH storage tank was moved from the cement and sewer drained 1st floor from bldg. #16 (see: Plan A-1). No more tanks have been added to the #1 tank farm.

During this period, the two 8,000 gal. storage tanks were converted to hold mineral oil; in the mid 1960's, they were again converted to hold 50% NaOH.

In 1974, the #1 dike was completely cemented with concrete walls poured to enclose all the tanks, except the 50% NaOH tank. A sump and a drain to the sewer was also installed (ref: drw 1788).

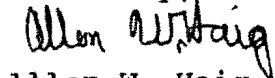
In 1981, this tank farm was extended (see dike #2 on Plan C-1) and eight new 8,000 gal. tanks installed. The 50% NaOH tanks were also diked (ref: drw 1804).

In addition to the above chemicals stored in the north tank area, sodium C14-16 olefin sulfonate and diethanolamide are now also stored there.

Considering the type of chemicals stored in this area, I do not know if the Board considers any of them a possible groundwater hazard. If requested, a boring could be drilled near dike #1.

Let me know if you have any further questions or comments on this report.

Sincerely,



Allen W. Haig
Environmental & Safety Engineer

phone: 818 846-9822

:REGIONWQ

APPENDIX 1

BORING PROTOCOL & TEST METHODS

APPENDIX 1

**SOIL BORING PROTOCOL
UNIFIED SOIL CLASSIFICATION SYSTEM
SOIL SAMPLING PROTOCOL
MONITORING WELL CONSTRUCTION PROTOCOL**

Soil Boring Protocol

The methods Active Leak Testing, Inc. (ALT) practices for soil borings has been reviewed and approved by a State of California Registered Geologist. These practices are followed to insure the integrity of the information supplied by ALT upon completion of investigation.

Preparation

1. The Underground Service Alert will be informed of the intention to bore at least 48 hours in advance.
2. The Project Manager will establish a safety zone in the area of the drill rig by use of traffic barriers, traffic cones or safety tape. No unauthorized person or persons without proper safety equipment shall enter this zone.
3. An appropriate diameter hole is cored through the existing concrete or asphalt pavement at the desired boring location.
4. The subsurface soil is probed, with a metal rod, to a depth of three to four feet.

Borings

1. Soil borings are performed by truck mounted drilling rigs utilizing continuous flight 6 to 12 inch hollow stem augers.
2. When a subsurface obstacle is encountered within the first five feet of a boring the boring is halted, the auger is removed and the soil is probed for indications of piping or tanks etc. If the nature of the object is undeterminable the boring will be halted and the hole abandoned.
3. The project Manager supervises the boring procedure to insure that the soil boring is conducted in a proper manner and that no unnecessary risks are taken.
4. The Project Manager supervises the personnel to insure that proper safety equipment is worn at all times when within the safety zone.
5. The Project Manager or Geologist maintains a boring log to record descriptions of the lithology penetrated by the boring. All changes in lithology are noted and soil types are described utilizing the Unified Soil Classification System (USCS).

Quality Control

1. In order to avoid contamination from a previous site, the boring equipment and augers are steam cleaned prior to delivery to the site.
2. When multiple borings are required a new set of augers is used for each boring location. If augers need be reused they are washed with Tri-sodium Phosphate (TSP) soap and rinsed with clean water before use.
3. All soil brought to the surface during the boring process is placed in DOT 55 gallon drums, covered and taken away for proper disposal.

Unified Soil Classification System

| Major Divisions | | | Group Symbols | Soil Description |
|--|---|--|---------------|---|
| COARSE GRAINED SOIL (More Than 50% Material Larger Than The #200 Sieve) | GRAVEL (More Than 50% Material Larger Than #4 Sieve) | Clean GRAVEL (Less Than 5% Fines) | GW | Well Graded Gravel, Sandy GRAVEL. Must have an equal distribution of Fine and Coarse Gravel. |
| | | | GP | Poorly Graded Gravel, Sandy GRAVEL. Gap Graded, little or no Fines. |
| | | GRAVEL With Fines (More Than 12% Fines) | GM | Silty GRAVEL, Silty, Sandy GRAVEL. |
| | | | GC | Clayey GRAVEL, Clayey, Sandy GRAVEL. |
| | SAND (More Than 50% Material Smaller Than #4 Sieve) | Clean SAND (Less Than 5% Fines) | SW | Well Graded Sand, Grownly SAND. Must have an equal distribution of fine, medium, and coarse Sand. |
| | | | SP | Poorly Graded Sand, Grownly SAND. Gap Graded, little or no fines. |
| | | SAND With Fines (More Than 12% Fines) | SM | Silty SAND, Silty, Grownly SAND. |
| | | | SC | Clayey SAND, Clayey, Grownly SAND. |
| FINE GRAINED SOIL (More Than 50% Material Smaller Than The #200 Sieve) | SILT & CLAY (Liquid Limit Less Than 50) | | ML | Inorganic SILT, Sandy or Clayey SILT. Low to No plasticity. |
| | | | CL | Inorganic Clay, Sandy or Silty CLAY. Low to Medium plasticity. |
| | | | OL | Organic SILT or Organic Silty CLAY. Low to Medium plasticity. |
| | SILT & CLAY (Liquid Limit More Than 50) | | MH | Inorganic SILT, Micaceous or Diatomaceous Sandy SILT, Elastic SILT. Medium to High plasticity. |
| | | | CH | Inorganic CLAY with High plasticity. |
| | | | OH | Organic CLAY & SILT with High plasticity. |
| HIGHLY ORGANIC SOIL | | | PT | PEAT & other Highly Organic soils. |

Particle Size Limits

| | | | | | | | | |
|---------------------------------|------|--------|--------|--------|--------|---------|----------|-------|
| 13 Sieve Opening in millimeters | | 0.075 | 0.425 | 2.00 | 4.75 | 10.0 | 75.0 | 300.0 |
| SILT & CLAY | SAND | | | GRAVEL | | COBBLES | BOULDERS | |
| | Fine | Medium | Coarse | Fine | Coarse | | | |
| 14 U.S. Standard Sieve Sizes | | #200 | #10 | #10 | #10 | 3" | 12" | |

Note: Borderline classifications may be designated by the use of dual Symbols, i.e. SP/SM, CL/ML etc.

Soil Sampling Protocol

The purpose of the soil boring protocol adopted and followed by Active Leak Testing, Inc. (ALT) is to insure the precision and accuracy of the chemical data received when the samples are laboratory analyzed. The methods that ALT practices have been reviewed and approved by a State of California Registered Geologist.

Sampling

1. During soil boring procedures three 2 1/2 X 6 inch core samples are recovered at 5 foot intervals by use of a split-barrel, modified Porter sampler driven by a 140 pound down hole hammer.
2. The soil sampling interval may be varied if contamination or water is encountered or if the boring extends beyond 20 feet.
3. When contamination is encountered the boring shall continue to a depth of 10 feet below the last indication of contamination.
4. When water is encountered the boring shall continue until the boring has penetrated at least 10 feet into the water bearing layer.
5. When a boring is to extend beyond 20 feet the samples will be recovered at 5 foot intervals for the first 20 feet and at 10 foot intervals thereafter.

Field Screening

1. The uppermost sample, recovered at each sampling interval during the sampling process, is placed in a Whirl-Pak plastic bag for field screening.
2. The bag sample is screened for organic vapors with a portable Organic Vapor Analyzer (OVA) for indications of possible soil contamination.
3. OVA readings are taken as the samples are recovered and are recorded on the individual boring logs for reference.

Quality Control

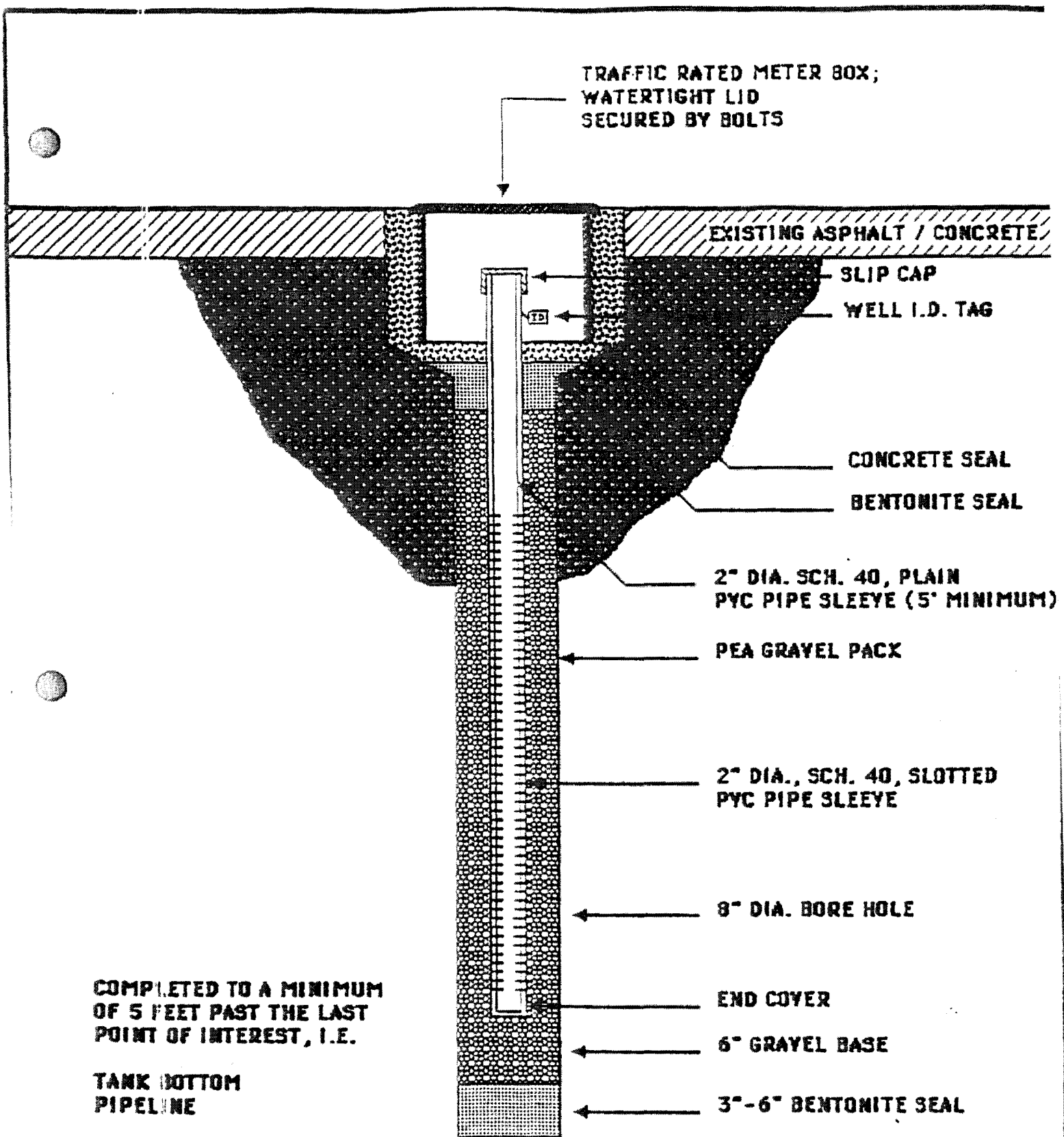
1. The augers and sampling equipment are steam cleaned before delivery to the site.
2. The brass sample tubes are laboratory washed with Tri-sodium Phosphate (TSP) before delivery to the site.
3. When the sampler is recovered it is disassembled in a clean working area to avoid cross contamination.
4. The lower two sample tubes are immediately capped with teflon or aluminum foil lined plastic caps, taped, labeled, double bagged (plastic) and placed in a chilled storage container for transport.
5. The sampler is washed with TSP soap and rinsed with clean water before the next interval sampling.
6. The sampler is assembled in a clean working area to avoid contamination.
7. Based on the information supplied by field screening, samples, which may have shown signs of contamination, are chosen for laboratory analysis.
8. The chosen samples and the required laboratory analysis are properly recorded on a Chain-of-Custody document. This documentation remains with the samples and is passed on to the laboratory representative.
9. The soil samples are maintained and transported, in a chilled state, to a State-certified laboratory for chemical analysis usually within 24 hours.

MONITORING WELL CONSTRUCTION PROTOCOL

Following the advancement of a boring to proper depth, the boring may be converted into a vadose zone monitoring well. A boring to be converted to a monitoring well is advanced to approximately 1 foot below the intended well completion depth. The augers are disconnected and a 6 inch bentonite seal is gravity fed to the bottom of the boring through the hollow stem auger and hydrated. Pea gravel is then gravity fed through the auger until the appropriate depth for casing emplacement is reached (normally a 6 inch layer).

A clean PVC liner is centered in the boring hole through the auger. The PVC liner is constructed of 2 inch, slotted and plain, schedule 40, flush threaded, NSF PW-rated PVC casing. The upper 5 feet of the well is constructed with plain casing. The remainder of the well is screened section constructed with casing containing .020 inch factory machined slots at .04 inch intervals. The bottom of the casing is closed with a 2 inch diameter, threaded, plug and the top is covered by a removable slip cap. A permanent identification tag is placed at the top of the well casing to prevent misinformation. No solvents or glues are used during well construction, and all casing is either new or steam cleaned prior to installation.

As the auger is removed the remainder of the boring is filled with gravity fed pea gravel to approximately 2 feet below the ground surface. A bentonite surface seal is then placed in the boring around the plain casing to prevent downward migration of fluids. A traffic rated meter box is centered over the well casing and cemented in place. The meter box is installed flush to the existing asphalt or concrete surface. A pictorial representation of a typical monitoring well is provided on the following page.



ACTIVE LEAK TESTING, INC.
300 South Beacon St. Suite 120
San Pedro, California 90731

TYPICAL MONITORING WELL

RECEIVED JAN 16 1990

DIVERSIFIED ANALYTICAL SERVICES

Environmental Laboratory

3732 W. Century Blvd.
Unit 3
Inglewood, CA 90303
(213) 671-5346
Fax: (213) 671-7216

D I V E R S I F I E D A N A L Y T I C A L S E R V I C E S S U M M A R Y O F S E R V I C E S T O B E P R O V I D E D F O R A C T I V E L E A K T E S T I N G C O N T R A C T

January 10, 1990

Diversified Analytical Services (DAS) will provide to Active Leak Testing (ALT) support for their routine business activities. This support will consist of providing ALT with the resources of the DAS Environmental Laboratory. Presently, DAS is set up to perform the following analyses:

- EPA Method 9040 for pH
- EPA Method 1010 for Flash Point
- EPA Method 6010 for Heavy Metals
- EPA Method 7196 for Hexavalent Chromium
- EPA Method 9010 for Cyanides
- EPA Method 9030 for Sulfides
- EPA Method 8010 for Purgeable Halocarbons
- EPA Method 8015 for Purgeable Non-Halogenated Compounds
- EPA Method 8020 for Purgeable Aromatics
- EPA Method 8040 for Phenolic Compounds
- EPA Method 8060 for Phthalate Esters
- EPA Method 8080 for Chlorinated Pesticides and PCB's
- EPA Method 8120 for Chlorinated Hydrocarbons
- EPA Method 418.1 for Total Recoverable Petroleum Hydrocarbons
- EPA Method 8015M for Volatile Petroleum Hydrocarbons
- EPA Method 8015E for Extractable Petroleum Hydrocarbons

Accreditation by the California State Department of Health Services under the Environmental Laboratory Accreditation Program for all of the above methods is expected in February, 1990.

To perform the above analyses, DAS the instrumentation listed below:

- Beckman Model 44 pH Meter
- Pensky-Martens Semi-Automatic Closed Cup Flash Tester
- Perkin-Elmer Plasma 40 Inductively Coupled Plasma (ICP) Emission Spectrophotometer with Epson Equity III Data System
- Sequoia-Turner Model 340 Ultraviolet/Visible Spectrophotometer
- Varian Model 3400 Gas Chromatograph with Flame Ionization and Electron Capture Detectors and a DS-654 Data System
- Varian Model 3400 Gas Chromatograph with Photoionization and Hall Electrolytic Conductivity Detectors and a DS 654 Data System
- Tekmar LSC-2000 Purge and Trap Sample Concentrator
- Foxboro Miran 1-FF Infrared Spectrophotometer

Supporting equipment includes: lab fume hood, digital balance, mechanical shaker, microcomputers with software and printers, copy machine, FAX machine

DAS has cooperative agreements with other environmental laboratories. These labs perform testing which DAS is not equipped to run at this

time. The analyses DAS requests from such labs are run on the following instruments:

Gas Chromatograph/Mass Spectrophotometer
Atomic Absorption Spectrophotometer
Ion Chromatograph
Bomb Calorimeter
Electron Microscope

Through the use of these labs, DAS is able to provide its customers with a comprehensive range of services at lower-than-usual prices and turnaround times.

The analytical methods requested by ALT are summarized below with the anticipated sample volume and price per analysis:

| Analysis | Anticipated Sample Volume | Price per Sample |
|--------------|---------------------------|------------------|
| EPA 8240 | 50 | \$175 |
| EPA 8270 | 50 | \$325 |
| EPA 8015E | 700 | \$ 47 |
| EPA 8015M | 700 | \$ 40 |
| EPA 418.1 | 750 | \$ 43 |
| EPA 413.1 | 100 | \$ 43 |
| EPA 8020 | 550 | \$ 55 |
| Organic Lead | 50 | \$ 20 |

A brief summary of each of the above methods is given below:

EPA Method 8240 - Volatile Compounds by GC/MS: An aliquot of the sample is placed in a purge and trap sample concentrator and subsequently desorbed onto a capillary column installed in a temperature programmed GC. The GC and column separate the compounds in the method and each compound is detected by a mass spectrometer. A computer processes the data and a concentration for each compound is determined.

EPA Method 8270 - Semivolatile Compounds by GC/MS: An aliquot of the sample is extracted with an appropriate solvent (usually methylene chloride). This extract is concentrated using standard K-D techniques and subsequently injected onto a capillary column installed in a temperature programmed GC. The GC and column separate the compounds in the method and each compound is detected by a mass spectrometer. A computer processes the data and a concentration for each compound is determined.

EPA Method 8015E - Extractable Petroleum Hydrocarbons by GC: An aliquot of the sample is extracted with freon. This extract is concentrated using standard K-D techniques and subsequently injected onto a Megabore column installed in a temperature programmed GC. The GC and column separate the diesel-range petroleum hydrocarbons and these compounds are detected on an FID. A computer processes the data and an aggregate concentration for this range of compounds is determined.

EPA Method 8015M - Volatile Petroleum Hydrocarbons by GC: An aliquot of sample is allowed to equilibrate at 95 deg C for 20 minutes in an enclosed vessel. A portion of the headspace gas in this vessel is collected in a gas-tight syringe and subsequently injected onto a Megabore column installed in a temperature programmed GC. The GC and column separate the gasoline-range petroleum hydrocarbons and these compounds are detected on an FID. A computer processes the data and an aggregate concentration for this range of compounds is determined.

EPA Method 418.1 - Total Recoverable Petroleum Hydrocarbons by IR: An aliquot of sample is extracted with freon. This extract is passed through silica gel and collected in a quartz cuvet and analyzed on an IR set at the appropriate wavelength. The absorbance of IR energy is correlated to a specific concentration of reference oil solution. The value obtained gives an indication of the TPH for the sample.

EPA Method 413.1 - Oil and Grease by IR: An aliquot of sample is extracted with freon. This extract is collected in a quartz cuvet and analyzed on an IR set at the appropriate wavelength. The absorbance of IR energy is correlated to a specific concentration of reference oil solution. The value obtained gives an indication of the Oil & Grease (petroleum hydrocarbons, vegetable oils, animal fats, soaps, and related matter) for the sample.

EPA Method 8020 - Volatile Aromatics by GC: An aliquot of the sample is placed in a purge and trap sample concentrator and subsequently desorbed onto a Megabore column installed in a temperature programmed GC. The GC and column separate the compounds in the method and each compound is detected by PID. A computer processes the data and a concentration for each compound is determined. Only the benzene, toluene, ethylbenzene, and xylenes will be reported for this analysis unless otherwise specified (other compounds are chlorobenzene and 3 isomers of dichlorobenzene).

DOHS Method - Organic Lead by ICP: An aliquot of sample is extracted with xylene. This extract is reacted with 1% Aliquat 336/MIBK on Iodine solution and analyzed on an ICP set for lead.

DAS maintains a comprehensive QA/QC program. Matrix Spikes (MS), Matrix Spike Duplicates (MSD), and blanks are run every twenty samples. Check standards are run daily to insure the integrity of the calibration for a given method and performance samples from third parties are analyzed periodically. All of the above values are scrutinized to make sure they are within the specifications for the given analyte(s). If they are not, sample runs are discontinued and the problem is rectified. All QA/QC data is documented and readily available for review. Outside labs utilized by DAS must follow these same guidelines. Their QA/QC programs are audited before any samples are sent to them.

Additional services provided to ALT under this contract are a turnaround time of five days for all samples submitted. This item may have to be modified depending on the volume of ALT samples coming in over a short period of time. DAS will also provide sample pick-up

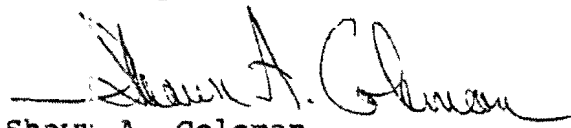
as part of this contract. No additional fee will be charged for this service if the pick-up location is in City of Los Angeles Boundaries. Rush analyses will be addressed as needed. All rush samples must be received no later than 11:00 am. For next day results the premium will be 2 times the price(s) listed above; for 2-3 day turnaround the premium will be 1.5 times the price(s) listed above.

DAS carries 1,000,000 general liability insurance to cover its employees, equipment, and office space. DAS also carries Error and Omissions insurance. However, The liability of DAS shall be limited to repeating the analysis of the same or similar samples at no additional cost because there are too many variables relating to the samples that DAS has no control over (i.e. proper sampling methodologies and field contamination).

Upon completion of the analytical report, an invoice will be prepared. The report and invoice will be FAXed to ALT to expedite their operations and billing endeavors. Terms will be net 60 days on all work performed.

Shawn Coleman will be the DAS contact for all technical matters relating to this contract. Regina Coleman will be handling all clerical, administrative and financial matters. Either of these individuals can be contacted at (213) 671-5346 between the hours of 9:00 am and 9:00 pm. If neither party is in the office at the time, ask the receptionist to page them.

Cordially,



Shawn A. Coleman,
Vice-President/
Laboratory Director

APPENDIX 2

DIESEL TANK SITE INVESTIGATION

SITE INVESTIGATION
ANDREW JERGENS CO.
BURBANK, CALIFORNIA
AREA 2 (DIESEL TANKS)
FILE NO. I-11586-3E

WILLIAM H. PARK

REGISTERED GEOLOGIST NO. 2271

3040 19TH STREET, SUITE 10
BAKERSFIELD, CALIFORNIA 93301
TELEPHONE (805) 327-9681

July 26, 1988

Mr. Bob McMenamy
c/o ESTI Engineering, Inc.
P. O. Box 10941
Bakersfield, California 93389

Dear Mr. McMenamy:

On March 7, 1988, eight test holes were drilled at the Andrew Jergens Company manufacturing plant located at 99 West Verdugo Avenue, Burbank, California (see Attachment A). The site is located in the northwest quarter of Section 13 and the northeast quarter of Section 14, T.1N., R.14W., S.B.B. & M.

The following underground storage tanks are located on the property: three 12,000 diesel tanks and one 6,500 gallon ethanol tank (see Attachment B). The test holes were drilled in the vicinity of these storage tanks to determine if soil contamination from product leaks exists and to establish monitoring wells in the test holes.

The investigation of this site is divided into two regions, referred to as Area No. 1 and Area No. 2. Area No. 1 is the location of the ethanol tank and Area No. 2 is the location of the three diesel tanks (see Attachment C). This report deals with Area No. 2.

Six test holes were drilled at Area No. 2 and completed as monitoring wells. These test holes are designated M.W. Nos. 3 through 8. M.W. Nos. 3 through 6 were drilled around the diesel tank cluster and M.W. Nos. 7 and 8 were drilled near

Mr. Bob McMenamy
c/o ESTI Engineering, Inc.
July 26, 1988
Page 2

the product lines (see Attachment D). Surface equipment and underground piping at Area No. 2 prevented drilling to the northwest and northeast of the tank cluster. The locations of M.W. Nos. 7 and 8 were similarly constrained.

M.W. Nos. 3 through 6 were drilled to a depth of 20 feet each and M.W. Nos. 7 and 8 were drilled to a depth of 7 feet each. Soil samples were collected at 5 foot intervals starting at a depth of 5 feet from M.W. Nos. 3 through 6. Soil samples were collected at a depth of 7 feet from M.W. Nos. 7 and 8. Selected samples were transported on ice to a state certified laboratory and analyzed for B.T.X. and T.P.H. diesel.

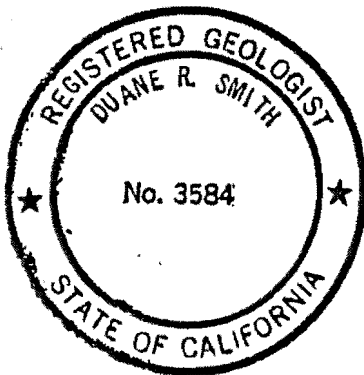
The following soil samples were submitted for analyses: M.W. No. 3 - 20 feet, M.W. No. 4 - 15 feet, M.W. No. 5 - 20 feet, M.W. No. 6 - 15 feet, M.W. No. 7 - 7 feet, and M.W. No. 8 - 7 feet. No B.T.X. or T.P.H. diesel was detected in any of these samples. Also, field screening did not indicate the presence of diesel contamination in any of the soil samples. Attachment E lists the results of the chemical analyses and includes the chain of custody record. Attachment F shows the logs of the test holes.

All six of the test holes were completed as monitoring wells. The holes were completed using 2-inch diameter PVC casing which was packed with sand around the slotted intervals and sealed with bentonite and concrete. Attachment G displays schematic diagrams of the monitoring wells.

Based on the results of this investigation, no significant diesel contamination exists in the soil beneath Area No. 2 and no mitigation measures are deemed necessary.

Mr. Bob McMenamy
c/o ESTI Engineering, Inc.
July 26, 1988
Page 3

If you have any questions or if we can be of further service,
please feel free to call.



Yours truly,

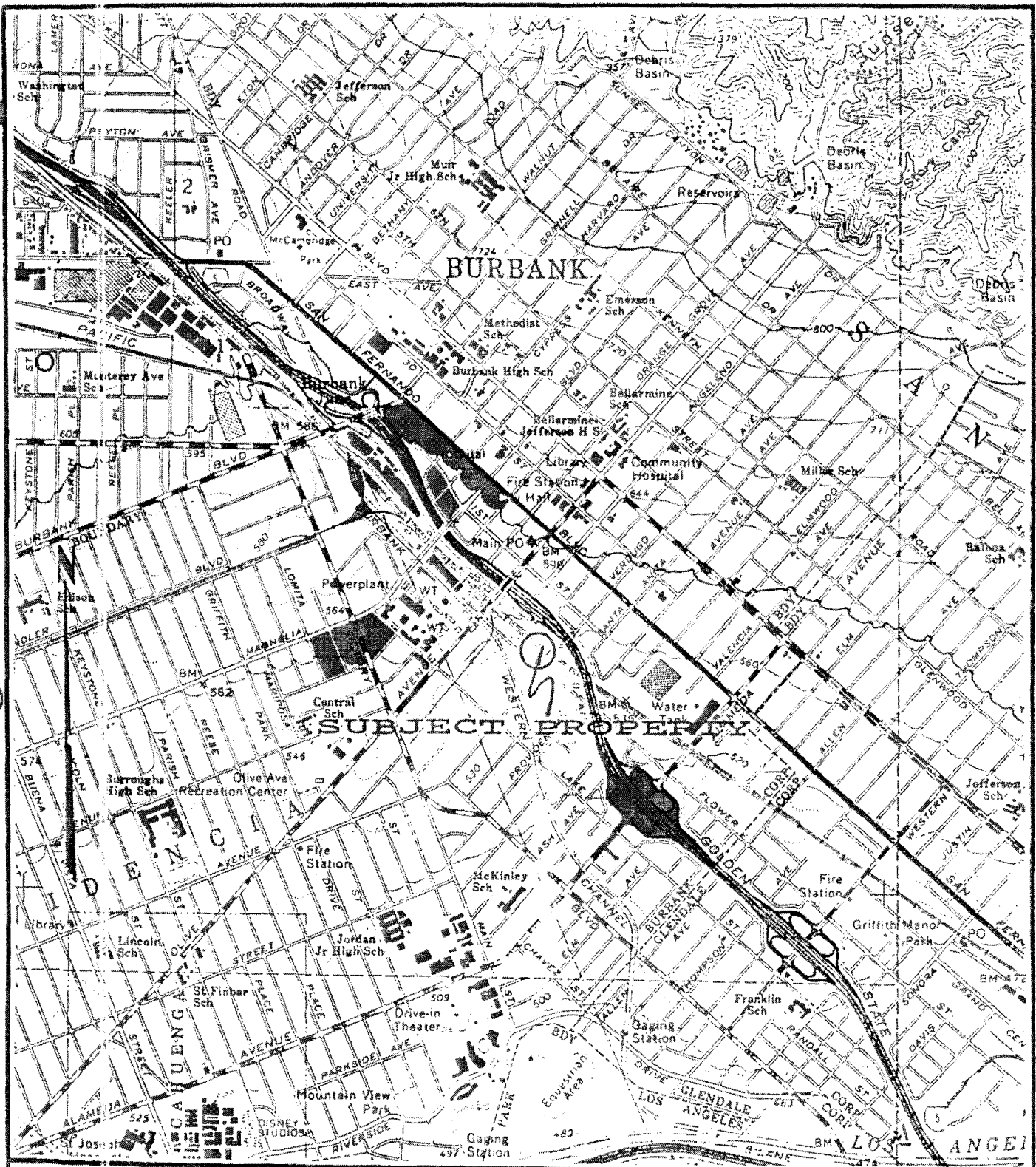
Duane R. Smith

Duane R. Smith
Registered Geologist
State of California No. 3584

Thomas F. Gutcher

Thomas F. Gutcher
Assistant Geologist

DRS/TFG/jk



LOCATION MAP

ANDREW JERGENS COMPANY
99 WEST VERDUGO AVENUE
BURBANK, CALIFORNIA

SCALE: 1" = 2000'

Source of Base Map: U.S.G.S. Burbank 7½ Minute Quadrangle, 1972.

ANDREW JERGENS CO.

U N D E R G R O U N D T A N K S U M M A R Y

| | Tank # | Size (Gal) | Age (Yrs) | Type of Tank | Present Contents | Past Contents | Pump Type | Usage | Through-Put Gal/Week |
|------------|-----------|---------------|--------------|-----------------|---------------------|------------------|--------------|---------------|-------------------------|
| Area No. 2 | 1 | 12,000 | 13 | Steel | Diesel | Same | Turbine | Stdby Fuel | (1) |
| | 2 | 12,000 | 9 | Steel | Diesel | Same | Turbine | Stdby Fuel | (1) |
| | 3 | 12,000 | 9 | Steel | Diesel | Same | Turbine | Stdby Fuel | (1) |
| Area No. 1 | 4 | 6,500 | N/A | Steel | Ethanol | Same | Suction | Manufacturing | 1,500 |

(1) Historic usage - twice yearly, 16 hour duration, total 5,000 gallons/year.

* The tanks have no secondary containment or leak detection system at present.

* The tanks have no cathodic system at present.

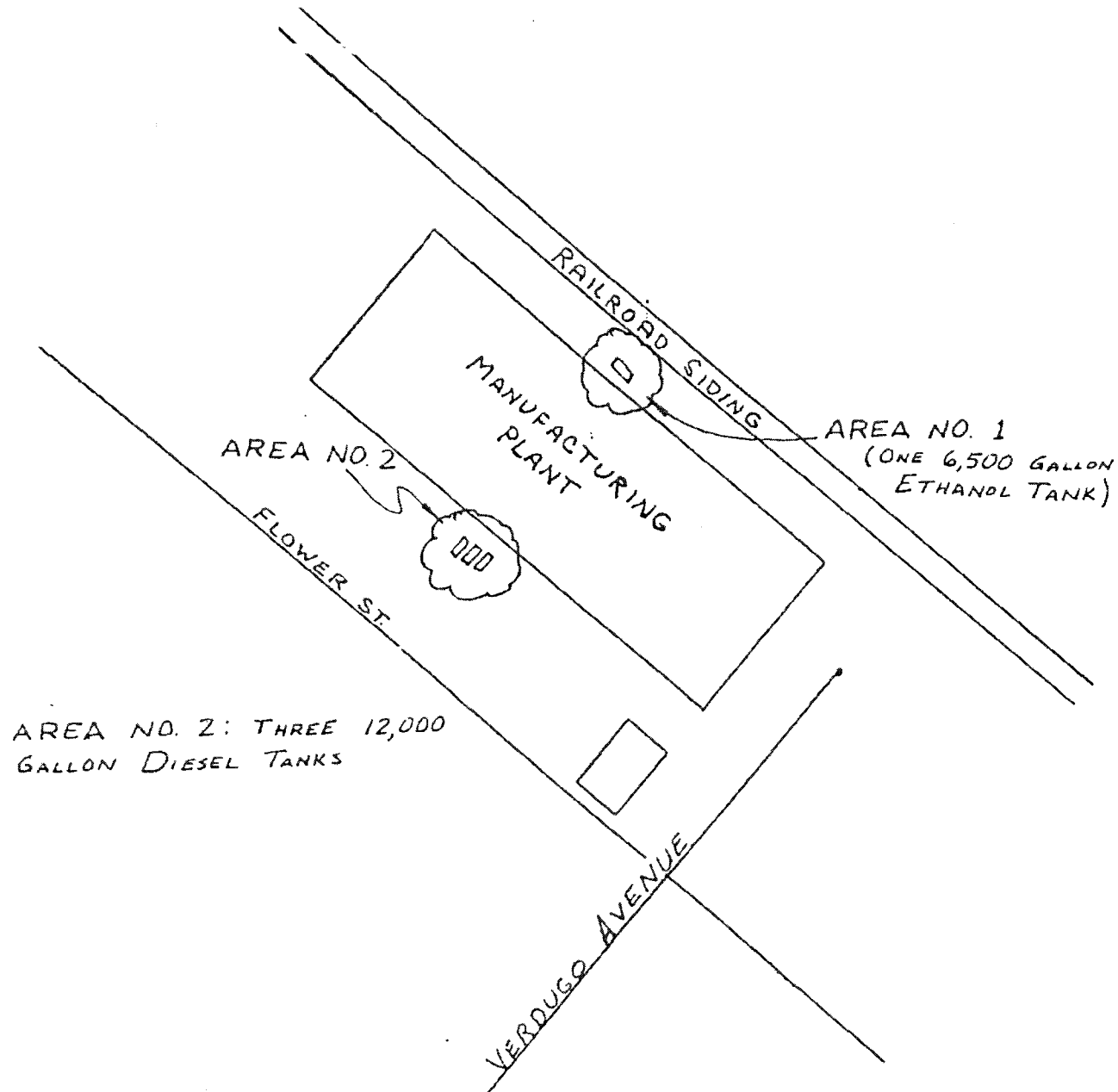
* There have been no suspected or detected leaks in Tanks 1, 2, or 4 or the related piping.

* The 6,500 gallon ethanol tank has reportedly been in place since at least 1945.

VICINITY MAP

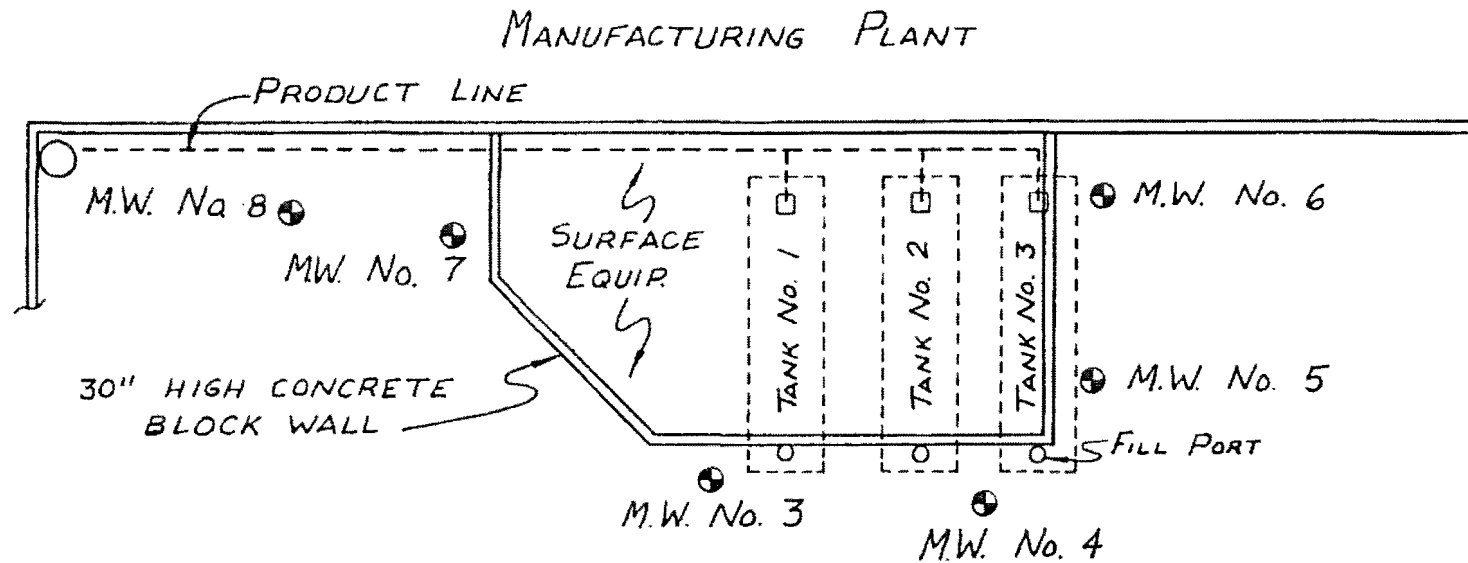


NO SCALE



THE ANDREW JERGENS CO.
99 W. VERDUGO AVE.
BURBANK CALIF

SITE MAP - AREA No. 2
ANDREW JERGENS COMPANY



SCALE: 1" = 20'
TEST HOLE LOCATION - ⊕

W. H. PARK AND ASSOCIATES - JULY 1988

AGRICULTURE
CHEMICAL ANALYSIS
PETROLEUM

BC

LABORATORIES, INC.

J. J. EGLIN, REG. CHEM. ENGR.

4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Purgeable Aromatics
(SOIL)

E.S.T.I. ENGINEERING
P.O. BOX 10941
BAKERSFIELD, CA. 93389
Attention: TIM BROWN

Date of
Report: 15-Mar-88

Lab No.: 1813-1
Sample Desc.: A. JERGENS CO. BURBANK
MW #3 @20'

DATE SAMPLE
COLLECTED:
09-Mar-88

DATE SAMPLE
RECEIVED @ LAB:
09-Mar-88

DATE ANALYSIS
COMPLETED:
14-Mar-88

| Constituent | Reporting Units | Analysis Results | Minimum Reporting Level |
|----------------------------|--------------------|---------------------|-------------------------------|
| Benzene | ug/g | None Detected | 0.10 |
| Toluene | ug/g | None Detected | 0.10 |
| Ethyl Benzene | ug/g | None Detected | 0.10 |
| p-Xylene | ug/g | None Detected | 0.10 |
| m-Xylene | ug/g | None Detected | 0.10 |
| o-Xylene | ug/g | None Detected | 0.10 |
| Isopropyl Benzene | ug/g | None Detected | 0.10 |
| Petroleum Hydrocarbons | ug/g | None Detected | 10.00 |
| Total Pet. Hydrocarbons | ug/g | None Detected | 0.10 |

TEST METHOD: California State D.O.H.S. T.P.H. for Diesel
Dry Matter Basis

Comments:

PETROLEUM HYDROCARBONS: Quantification of volatile hydrocarbons present (C1 to C30) utilizing a diesel factor. As outlined by the California D.O.H.S. These petroleum hydrocarbons are in addition to the constituents specifically defined on this report.

TOTAL PETROLEUM HYDROCARBONS: The sum total of all [non-chlorinated] constituents on this report.

By

J. J. Eglin
J. J. Eglin

Robert Plaisance
Robert Plaisance
Chemist

AGRICULTURE

CHEMICAL ANALYSIS

PETROLEUM

BC**LABORATORIES, INC.**

J. J. EGLIN, REG. CHEM. ENGR.

4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Purgeable Aromatics
(SOIL)E.S.T.I. ENGINEERING
P.O. BOX 10941
BAKERSFIELD, CA. 93389
Attention: TIM BROWNDate of
Report: 15-Mar-88Lab No.: 1813-2
Sample Desc.: A. JERGENS CO. BURBANK
MW #4 @15'DATE SAMPLE
COLLECTED:
09-Mar-88DATE SAMPLE
RECEIVED @ LAB:
09-Mar-88DATE ANALYSIS
COMPLETED:
14-Mar-88

| Constituent | Reporting Units | Analysis Results | Minimum Reporting Level |
|---------------|--------------------|---------------------|-------------------------------|
| Benzene | ug/g | None Detected | 0.10 |
| Toluene | ug/g | None Detected | 0.10 |
| Ethyl Benzene | ug/g | None Detected | 0.10 |
| p-Xylene | ug/g | None Detected | 0.10 |
| m-Xylene | ug/g | None Detected | 0.10 |
| o-Xylene | ug/g | None Detected | 0.10 |
| Isopropyl | | | |
| Benzene | ug/g | None Detected | 0.10 |
| Petroleum | | | |
| Hydrocarbons | ug/g | None Detected | 10.00 |
| Total Pet. | | | |
| Hydrocarbons | ug/g | None Detected | 0.10 |

TEST METHOD: California State D.O.H.S. T.P.H. for Diesel
Dry Matter Basis

Comments:

PETROLEUM HYDROCARBONS: Quantification of volatile hydrocarbons
present (C1 to C30) utilizing a diesel factor. As outlined by
the California D.O.H.S. These petroleum hydrocarbons are in
addition to the constituents specifically defined on this report.TOTAL PETROLEUM HYDROCARBONS: The sum total of all [non-chlorin-
ated] constituents on this report.

By

J. J. Eglin
J. J. Eglin*Robert Plaisance*Robert Plaisance
Chemist

AGRICULTURE

CHEMICAL ANALYSIS

PETROLEUM

BC

LABORATORIES, INC.

J. J. EGLIN, REG. CHEM. ENGR.

4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Purgeable Aromatics
(SOIL)

E S.T.I. ENGINEERING
P O. BOX 10941
BAKERSFIELD, CA. 93389
Attention: TIM BROWN

Date of
Report: 15-Mar-88

Lab No.: 1813-3
Sample Desc.: A. JERGENS CO. BURBANK
MW #5 @20'

DATE SAMPLE
COLLECTED:
09-Mar-88

DATE SAMPLE
RECEIVED @ LAB:
09-Mar-88

DATE ANALYSIS
COMPLETED:
14-Mar-88

| Constituent | Reporting Units | Analysis Results | Minimum Reporting Level |
|----------------------------|--------------------|---------------------|-------------------------------|
| Benzene | ug/g | None Detected | 0.10 |
| Toluene | ug/g | None Detected | 0.10 |
| Ethyl Benzene | ug/g | None Detected | 0.10 |
| p-Xylene | ug/g | None Detected | 0.10 |
| m-Xylene | ug/g | None Detected | 0.10 |
| o-Xylene | ug/g | None Detected | 0.10 |
| Isopropyl Benzene | ug/g | None Detected | 0.10 |
| Petroleum Hydrocarbons | ug/g | None Detected | 10.00 |
| Total Pet. Hydrocarbons | ug/g | None Detected | 0.10 |

TEST METHOD: California State D.O.H.S. T.P.H. for Diesel
Dry Matter Basis

Comments:

PETROLEUM HYDROCARBONS: Quantification of volatile hydrocarbons present (C1 to C30) utilizing a diesel factor. As outlined by the California D.O.H.S. These petroleum hydrocarbons are in addition to the constituents specifically defined on this report.

TOTAL PETROLEUM HYDROCARBONS: The sum total of all [non-chlorinated] constituents on this report.

By

J. J. Eglin
J. J. Eglin

Robert Plaisance

Robert Plaisance
Chemist

AGRICULTURE

CHEMICAL ANALYSIS

PETROLEUM

BC

LABORATORIES, INC.

J. J. EGLIN, REG. CHEM. ENGR.

4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Purgeable Aromatics
(SOIL)

E.S.T.I. ENGINEERING
P.O. BOX 10941
BAKERSFIELD, CA. 93389
Attention: TIM BROWN

Date of
Report: 15-Mar-88

Lab No.: 1813-4
Sample Desc.: A. JERGENS CO. BURBANK
MW #6 @15'

DATE SAMPLE
COLLECTED:
09-Mar-88

DATE SAMPLE
RECEIVED @ LAB:
09-Mar-88

DATE ANALYSIS
COMPLETED:
14-Mar-88

| Constituent | Reporting Units | Analysis Results | Minimum Reporting Level |
|----------------------------|--------------------|---------------------|-------------------------------|
| Benzene | ug/g | None Detected | 0.10 |
| Toluene | ug/g | None Detected | 0.10 |
| Ethyl Benzene | ug/g | None Detected | 0.10 |
| p-Xylene | ug/g | None Detected | 0.10 |
| m-Xylene | ug/g | None Detected | 0.10 |
| o-Xylene | ug/g | None Detected | 0.10 |
| Isopropyl Benzene | ug/g | None Detected | 0.10 |
| Petroleum Hydrocarbons | ug/g | None Detected | 10.00 |
| Total Pet. Hydrocarbons | ug/g | None Detected | 0.10 |

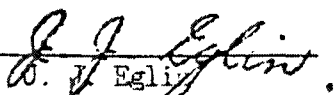
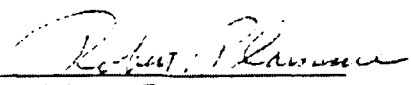
TEST METHOD: California State D.O.H.S. T.P.H. for Diesel
Dry Matter Basis

Comments:

PETROLEUM HYDROCARBONS: Quantification of volatile hydrocarbons present (C1 to C30) utilizing a diesel factor. As outlined by the California D.O.H.S. These petroleum hydrocarbons are in addition to the constituents specifically defined on this report.

TOTAL PETROLEUM HYDROCARBONS: The sum total of all [non-chlorinated] constituents on this report.

By


J. J. Eglin
Robert Plaisance
Chemist

AGRICULTURE

CHEMICAL ANALYSIS

PETROLEUM

BC

LABORATORIES, INC.

J. J. EGLIN, REG. CHEM. ENGR.

4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Purgeable Aromatics
(SOIL)U.S.T.I. ENGINEERING
P.O. BOX 10941
BAKERSFIELD, CA. 93389
Attention: TIM BROWNDate of
Report: 15-Mar-88Lab No.: 1813-5
Sample Desc.: A. JERGENS CO. BURBANK
MW #7 @7"DATE SAMPLE
COLLECTED:
09-Mar-88DATE SAMPLE
RECEIVED @ LAB:
09-Mar-88DATE ANALYSIS
COMPLETED:
14-Mar-88

| Constituent | Reporting Units | Analysis Results | Minimum Reporting Level |
|----------------------------|--------------------|---------------------|-------------------------------|
| Benzene | ug/g | None Detected | 0.10 |
| Toluene | ug/g | None Detected | 0.10 |
| Ethyl Benzene | ug/g | None Detected | 0.10 |
| p-Xylene | ug/g | None Detected | 0.10 |
| m-Xylene | ug/g | None Detected | 0.10 |
| o-Xylene | ug/g | None Detected | 0.10 |
| Isopropyl Benzene | ug/g | None Detected | 0.10 |
| Petroleum Hydrocarbons | ug/g | None Detected | 10.00 |
| Total Pet. Hydrocarbons | ug/g | None Detected | 0.10 |

TEST METHOD: California State D.O.H.S. T.P.H. for Diesel
Dry Matter Basis

Comments:

PETROLEUM HYDROCARBONS: Quantification of volatile hydrocarbons
present (C1 to C30) utilizing a diesel factor. As outlined by
the California D.O.H.S. These petroleum hydrocarbons are in
addition to the constituents specifically defined on this report.TOTAL PETROLEUM HYDROCARBONS: The sum total of all [non-chlorin-
ated] constituents on this report.By J. J. Eglin
J. J. EglinRobert Plaisance
Robert Plaisance
Chemist

AGRICULTURE

CHEMICAL ANALYSIS

PETROLEUM

BC**LABORATORIES, INC.**

J. J. EGLIN, REG. CHEM. ENGR.

4100 PIERCE RD., BAKERSFIELD, CALIFORNIA 93308 PHONE 327-4911

Purgeable Aromatics
(SOIL)E.S.T.I. ENGINEERING
P.O. BOX 10941
BAKERSFIELD, CA. 93389
Attention: TIM BROWNDate of
Report: 15-Mar-88Lab No.: 1813-6
Sample Desc.: A. JERGENS CO. BURBANK
MW #8 @7'DATE SAMPLE
COLLECTED:
09-Mar-88DATE SAMPLE
RECEIVED @ LAB:
09-Mar-88DATE ANALYSIS
COMPLETED:
14-Mar-88

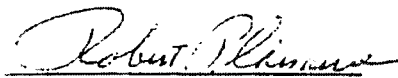
| Constituent | Reporting Units | Analysis Results | Minimum Reporting Level |
|---------------|--------------------|---------------------|-------------------------------|
| Benzene | ug/g | None Detected | 0.10 |
| Toluene | ug/g | None Detected | 0.10 |
| Ethyl Benzene | ug/g | None Detected | 0.10 |
| p-Xylene | ug/g | None Detected | 0.10 |
| m-Xylene | ug/g | None Detected | 0.10 |
| o-Xylene | ug/g | None Detected | 0.10 |
| Isopropyl | | | |
| Benzene | ug/g | None Detected | 0.10 |
| Petroleum | | | |
| Hydrocarbons | ug/g | None Detected | 10.00 |
| Total Pet. | | | |
| Hydrocarbons | ug/g | None Detected | 0.10 |

TEST METHOD: California State D.O.H.S. T.P.H. for Diesel
Dry Matter Basis

Comments:

PETROLEUM HYDROCARBONS: Quantification of volatile hydrocarbons
present (C1 to C30) utilizing a diesel factor. As outlined by
the California D.O.H.S. These petroleum hydrocarbons are in
addition to the constituents specifically defined on this report.TOTAL PETROLEUM HYDROCARBONS: The sum total of all [non-chlorin-
ated] constituents on this report.

By


J. J. Eglin
Robert Plaisance
Chemist

Bill to ESTI-Job# 87148
CHAIN OF CUSTODY RECORD-SAMPLE ANALYSIS REQUEST

PROJ. NO.

PROJECT NAME

Location of Sampling: A. Jergens Co., 99 W. Verdugo, Burbank

Collector: Tom Gutcher Date Sampled 3/7/88 Time p.m. hours

Affiliation of Sampler W. H. Park and Associates

Address 3040 19th St. Bakersfield, CA 93301
number street city state zip

Telephone (805) 327-9681 Company Contact Tom

| Quantity | COLLECTOR'S | TYPE OF | FIELD INFORMATION** |
|-------------------|-------------|-------------|---------------------|
| Container Type | SAMPLE NO. | SAMPLE* | |
| <u>brass ring</u> | <u>MW#3</u> | <u>soil</u> | <u>20'</u> |
| <u>brass ring</u> | <u>MW#4</u> | <u>soil</u> | <u>15'</u> |
| <u>brass ring</u> | <u>MW#5</u> | <u>soil</u> | <u>20'</u> |
| <u>brass ring</u> | <u>MW#6</u> | <u>soil</u> | <u>15'</u> |

MATERIAL SAMPLED soil near 3-12,000 gallon diesel tanks

DEPTH 15'-20' METHOD OF SAMPLING split spoon
(THIEF, COREHOLE, ETC.)

Analysis Requested

Test Method EPA 8015 per clients proposal

Preservation methods: keep cold until analyzed

* Indicate whether sample is soil, sludge, etc.

** Use back of page for additional information relative to sample location

Sample Receiver:

1. B. C. Laboratories

name and address of organization receiving sample

contact: Mr. Blair Burgess, County of L.A.
Waste Management Division
1450 Alcazar St., L.A. 90033

#1813-1
thru-

Chain of Possession:

1. Tom Gutcher Geologist 3/7/88-3/8/88
signature title inclusive dates

2. Jean Gutcher 3-8-88
signature title inclusive dates

3.
signature title inclusive dates

Bill to ESTI-Job #87148
CHAIN OF CUSTODY RECORD - SAMPLE ANALYSIS REQUEST

PROJ. NO.

PROJECT NAME

Location of Sampling: A. Jergens Co., 99 W. Verdugo, Burbank

Collector Tom Gutcher Date Sampled 3/7/88 Time p.m. hours

Affiliation of Sampler W. H. Park and Associates

Address 3040 19th St. Bakersfield, CA 93301
number street city state zip

Telephone (805) 327-9681 Company Contact Tom

Quantity

Container Type

COLLECTOR'S

SAMPLE NO.

TYPE OF

SAMPLE*

FIELD INFORMATION**

brass ring MW#7 soil 7'

brass ring MW#8 soil 7'

MATERIAL SAMPLED soil near diesel product transfer lines

DEPTH 7' METHOD OF SAMPLING split spoon
(THIEF, COREHOLE, ETC.)

Analysis Requested

Test Method EPA 8015 per client's proposal

Preservation methods: keep cold until analyzed

* Indicate whether sample is soil, sludge, etc.

** Use back of page for additional information relative to sample location

Sample Receiver:

1. B. C. Laboratories

name and address of organization receiving sample

contact: Mr. Blair Burgess, L.A. County
Waste Management Division
1450 Alcazar St., L.A. 90033

Chain of Possession:

1. Tom Gutcher Geologist 3/7/88-3/8/88
signature title inclusive dates

2. Jean Malby 3-8-88
signature title inclusive dates

3.
signature title inclusive dates

#1513-540

LOG OF TEST HOLE

| | | | | W. H. PARK AND ASSOCIATES | |
|------------------------|---------------|---------------------|------------------------------|--|------------|
| | | | | LOCATION: <u>Andrew Jergens Co., Burbank</u> | |
| | | | | TEST HOLE IDENTIFICATION: <u>M.W. No. 3</u> | |
| | | | | DATE DRILLED: <u>03/07/88</u> ELEVATION: <u>550±'</u> | |
| | | | | RIG TYPE: <u>6" Hollow Stem Flight Auger</u> | |
| Lithologic Column | Sample Depths | Meter Reading (ppm) | Total Petroleum Hydrocarbons | ppm gasoline | ppm diesel |
| | | | | | |
| 0 | | | | | X |
| Lithologic Description | | | | | |
| 5 | * | 3 | | Sand, brown, silty, very fine to very coarse grained, loose, moist, no odor. | |
| 10 | * | 0 | | No odor. | |
| 15 | * | 0 | | Silt, dark brown, sandy, fine grained, poorly indurated, moist, no odor. | |
| 20 | ⊙ | 2 | None Detected | Sand, brown, silty, very fine to very coarse grained, gravel and cobbles abundant, poorly indurated, moist, no odor. | |
| 25 | | | | | |
| 30 | | | | | |
| 35 | | | | | |
| 40 | | | | | |

T.D. - 20'

* - Sample Location

⊙ - Sample Analyzed

LOG OF TEST HOLE

| W. H. PARK AND ASSOCIATES | | | | |
|--|---------------|---------------------|--|---|
| LOCATION: <u>Andrew Jergens Co., Burbank</u> TEST HOLE IDENTIFICATION: <u>M.W. No. 4</u> DATE DRILLED: <u>03/07/88</u> ELEVATION: <u>550±'</u> RIG TYPE: <u>6" Hollow Stem Flight Auger</u> | | | | |
| Lithologic Column | Sample Depths | Meter Reading (ppm) | Total Petroleum Hydrocarbons ppm gasoline ppm diesel | Lithologic Description |
| 0 | | | <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 5 | * | 0 | | Sand, brown, silty, fine to coarse grained, poorly indurated, moist, no odor. |
| 10 | * | 0 | | Sand, tan, fine to medium grained, loose, no odor. |
| 15 | ⊙ | 0 | None Detected | Silt, brown, sandy, fine to coarse grained, poorly indurated, moist, no odor. |
| 20 | * | trace | | Fine grained, no odor. |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |
| 40 | | | | |

T.D. - 20'

* - Sample Location

⊙ - Sample Analyzed

LOG OF TEST HOLE

| W. H. PARK AND ASSOCIATES | | | | | |
|---------------------------|---------------|---------------------|---|---|---|
| | | | | | LOCATION: Andrew Jergens Co., Burbank |
| | | | | | TEST HOLE IDENTIFICATION: M.W. No. 5 |
| | | | | | DATE DRILLED: 03/07/88 ELEVATION: 550±' |
| | | | | | RIG TYPE: 6" Hollow Stem Flight Auger |
| Lithologic Column | Sample Depths | Meter Reading (ppm) | Total Petroleum Hydrocarbons ppm gasoline | X | Lithologic Description |
| | * | 0 | | | Silt, dark brown, sandy, fine to coarse grained, poorly indurated, moist, no odor. |
| | * | 0 | | | Sand, brown, silty, fine to very coarse grained, gravel abundant, poorly indurated, moist, no odor. |
| | * | 0 | | | Gravel absent, no odor. |
| | (*) | 0 | None Detected | | No odor. |

2. D. - 20'

* - Sample Location

⊛ - Sample Analyzed

LOG OF TEST HOLE

W. H. PARK AND ASSOCIATES

LOCATION: Andrew Jergens Co., Burbank

TEST HOLE IDENTIFICATION: M.W. No. 6

DATE DRILLED: 03/07/88 ELEVATION: 550±'

RIG TYPE: 6" Hollow Stem Flight Auger

| Lithologic Column | Sample Depths | Meter Reading (ppm) | Total Petroleum Hydrocarbons | | Lithologic Description |
|-------------------|---------------|---------------------|------------------------------|------------|---|
| | | | ppm gasoline | ppm diesel | |
| 0 | | | | X | |
| 5 | * | 0 | | | Silt, dark brown, sandy, fine to medium grained, gravel rare, poorly indurated, moist, no odor. |
| 10 | * | 0 | | | Sand, brown, silty, fine to coarse grained, poorly indurated, moist, no odor. |
| 15 | ⊛ | 0 | None Detected | | Fine to very coarse grained, no odor. |
| 20 | * | 0 | | | No odor. |
| 25 | | | | | |
| 30 | | | | | |
| 35 | | | | | |
| 40 | | | | | |

T.D. - 20'

* - Sample Location

⊛ - Sample Analyzed

LOG OF TEST HOLE

| W. H. PARK AND ASSOCIATES | | | | |
|---|---------------|---------------------|--|--|
| LOCATION: <u>Andrew Jergens Co., Burbank</u> | | | | |
| TEST HOLE IDENTIFICATION: <u>M.W. No. 7</u> | | | | |
| DATE DRILLED: <u>03/07/88</u> ELEVATION: <u>550±'</u> | | | | |
| RIG TYPE: <u>6" Hollow Stem Flight Auger</u> | | | | |
| Lithologic Column | Sample Depths | Meter Reading (ppm) | Total Petroleum Hydrocarbons | Lithologic Description |
| | | | ppm gasoline ppm diesel | |
| 0 | | | <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 5 | * | | | Sand, orange, brown, and grey, silty, fine to coarse grained, gravel abundant, mottled coloration, poorly indurated, moist, no odor. |
| 7 | ⊗ | 0 | None Detected | Sand, tan, fine to medium grained, loose, no odor. |
| 10 | * | | | |
| 15 | * | | | |
| 20 | * | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |
| 40 | | | | |

T.D. - 7'

* - Sample Location

⊗ - Sample Analyzed

LOG OF TEST HOLE

W. H. PARK AND ASSOCIATES

LOCATION: Andrew Jergens Co., Burbank

TEST HOLE IDENTIFICATION: M.W. No. 8

DATE DRILLED: 03/07/88 ELEVATION: 550±'

RIG TYPE: 6" Hollow Stem Flight Auger

Lithologic Description

0
5
10
15
20
25
30
35
40

Depth
(feet)

Lithologic
Column

Sample Depths

Meter Reading
(ppm)

Total
Petroleum
Hydrocarbons
ppm gasoline
ppm diesel

☐ ☒

None
Detected

⊛

0

Sand, tan, fine to very coarse grained,
loose, no odor.

T.D. - 7'

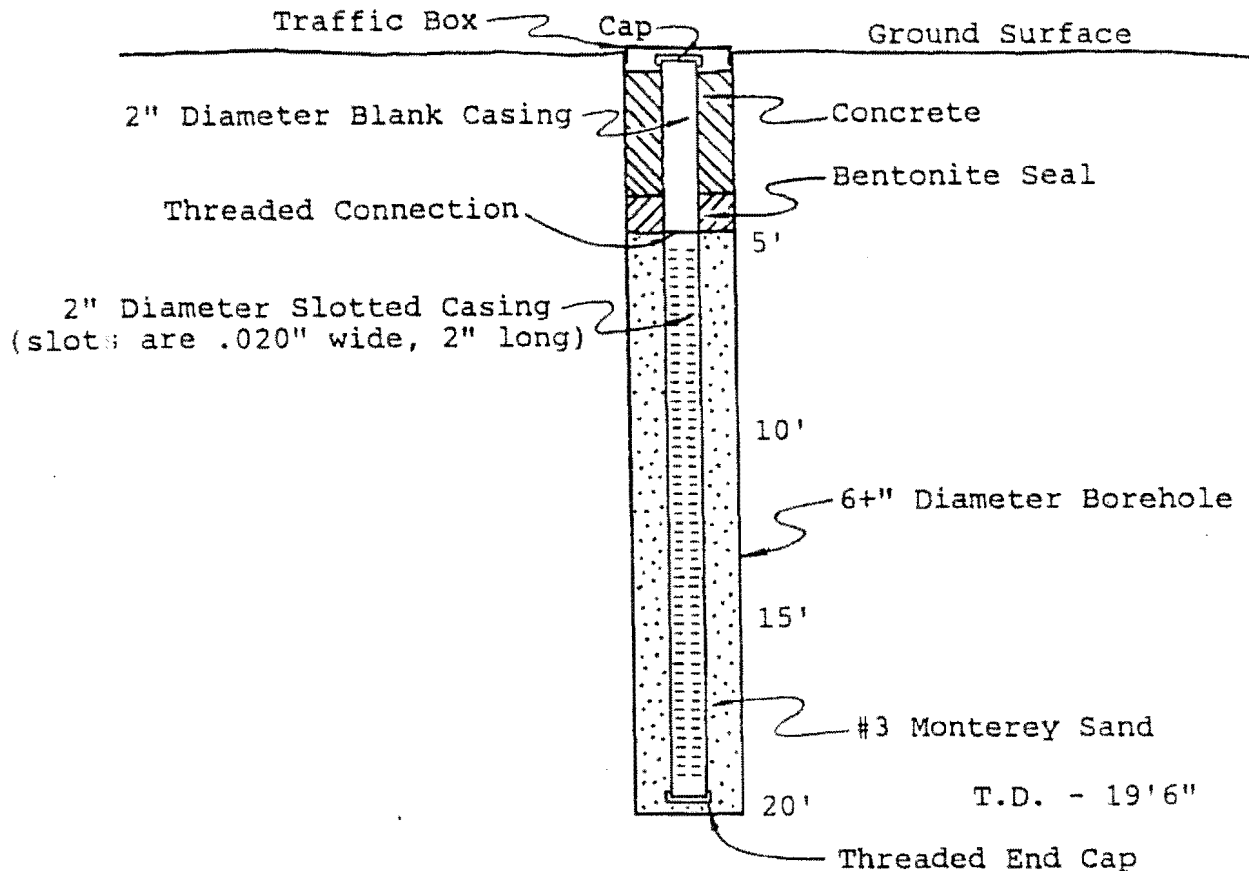
* - Sample Location

⊛ - Sample Analyzed

SCHEMATIC DIAGRAM OF MONITORING WELL

ANDREW JERGENS COMPANY
BURBANK, CALIFORNIA

MONITORING WELL: M.W. No. 3



SCALE: Vertical 1" = 5' Horizontal 1" = 10"

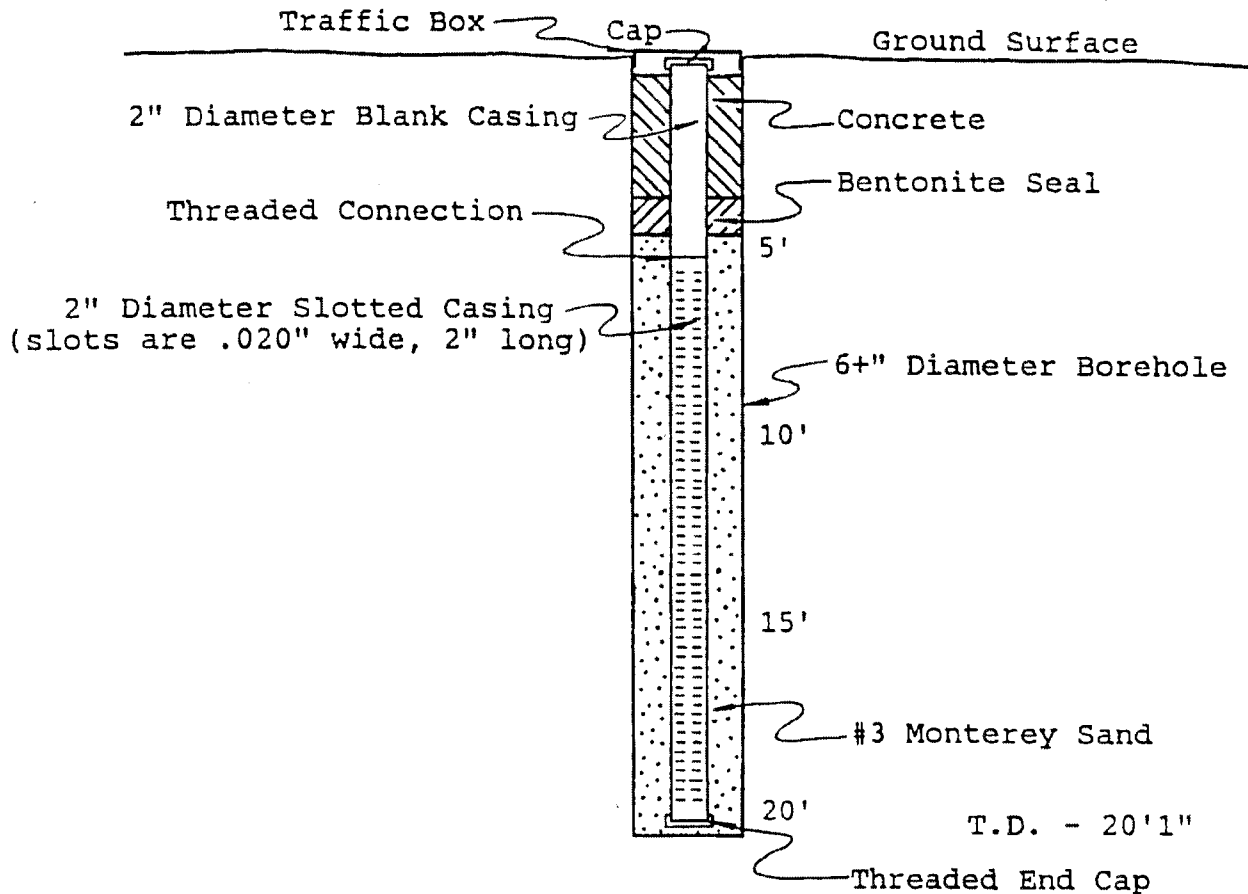
W. H. PARK AND ASSOCIATES - JULY 1988

SCHEMATIC DIAGRAM OF MONITORING WELL

ANDREW JERGENS COMPANY

BURBANK, CALIFORNIA

MONITORING WELL: M.W. No. 4



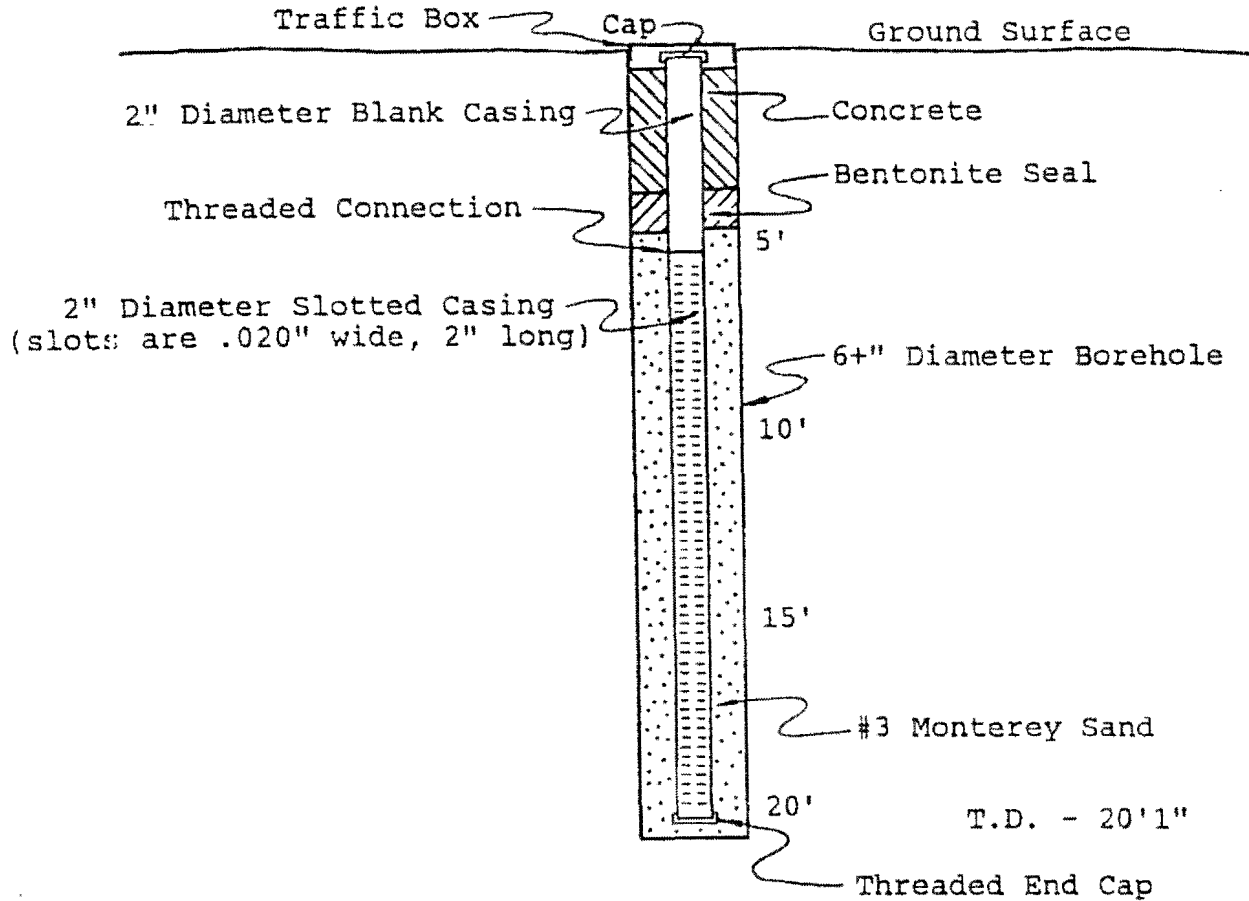
SCALE: Vertical 1" = 5' Horizontal 1" = 10"

W. H. PARK AND ASSOCIATES - JULY 1988

SCHEMATIC DIAGRAM OF MONITORING WELL

ANDREW JERGENS COMPANY
BURBANK, CALIFORNIA

MONITORING WELL: M.W. No. 5

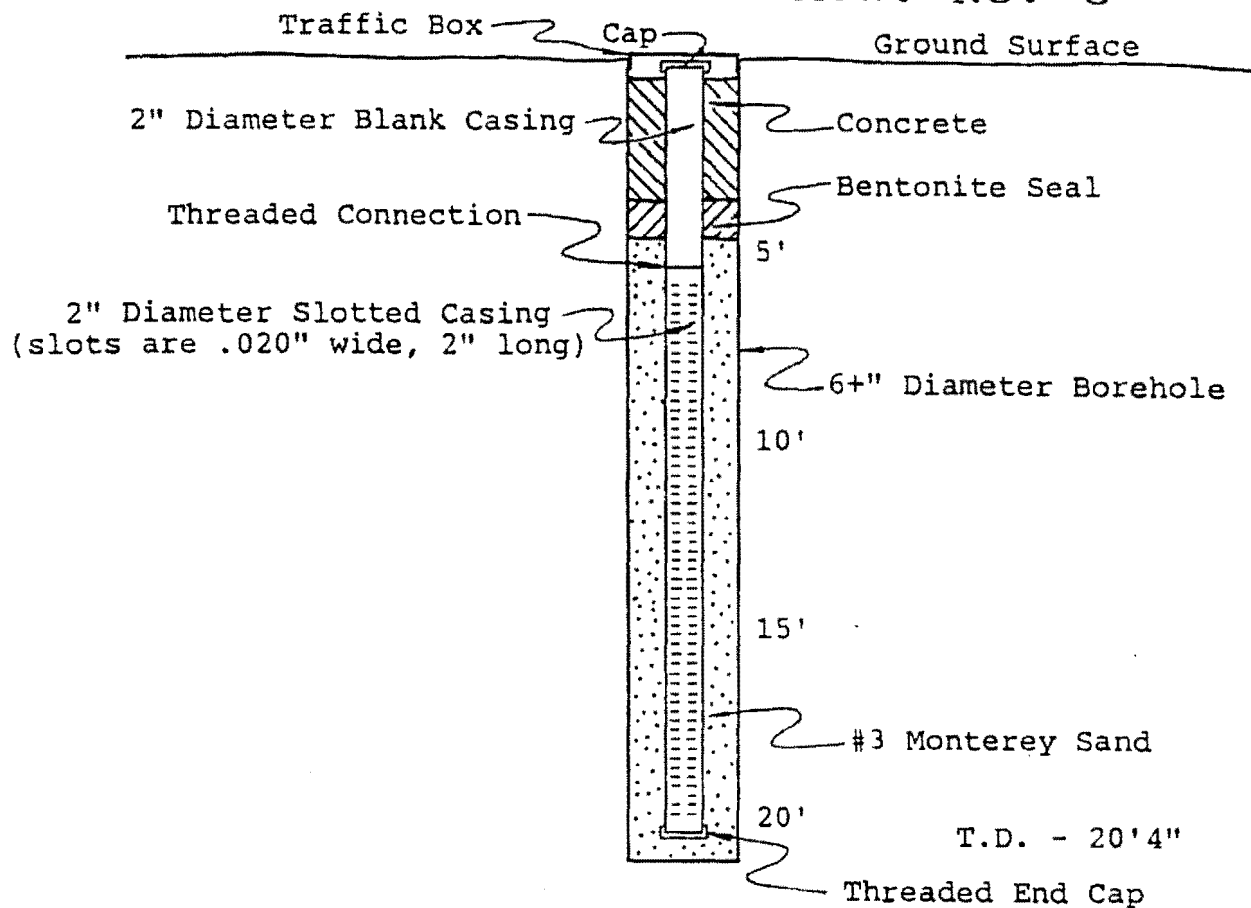


SCALE: Vertical 1" = 5' Horizontal 1" = 10"

W. H. PARK AND ASSOCIATES - JULY 1988

SCHEMATIC DIAGRAM OF MONITORING WELL
 ANDREW JERGENS COMPANY
 BURBANK, CALIFORNIA

MONITORING WELL: M.W. No. 6

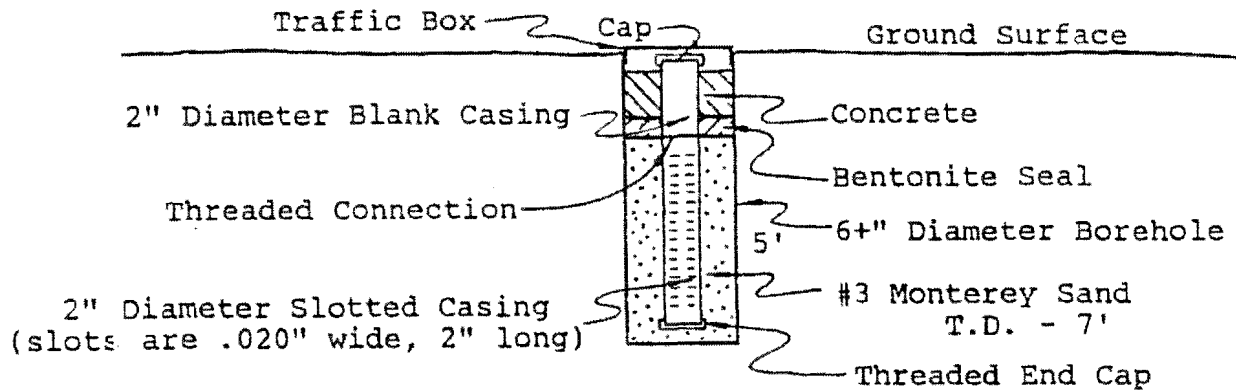


SCALE: Vertical 1" = 5' Horizontal 1" = 10"

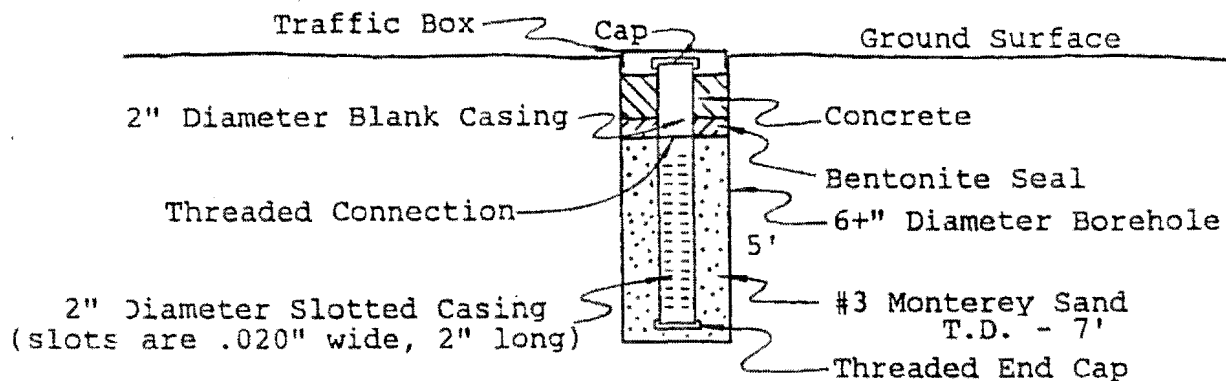
W. H. PARK AND ASSOCIATES - JULY 1988

SCHEMATIC DIAGRAM OF MONITORING WELL
ANDREW JERGENS COMPANY
 BURBANK, CALIFORNIA

MONITORING WELL: M.W. No. 7



MONITORING WELL: M.W. No. 8



SCALE: Vertical 1" = 5' Horizontal 1" = 10"

W. H. PARK AND ASSOCIATES - JULY 1988

Data Chart for Tank System Tightness Test

petrofile
TANK TESTER

PLEASE PRINT

| | | | | | |
|--|--|--|----------------------------------|---|---|
| 1. OWNER | Property <input checked="" type="checkbox"/> | Anderson Tergent Co. 2200 1/2 Bubbent ca | | | |
| | Tank(s) <input checked="" type="checkbox"/> | Name | Address | Representative | Telephone |
| 2. OPERATOR | | Name | Address | Representative | Telephone |
| 3. REASON FOR TEST (Explain Fully) | | | | | |
| 4. WHO REQUESTED TEST AND WHEN | | Name | Title | Company or Affiliation | Date |
| | | Address | | Telephone | |
| 5. WHO IS PAYING FOR THIS TEST? | | Company, Agency or Individual | | Person Authorizing | Title |
| | | Billing Address | | City | State |
| | | Attention of: | | Order No. | Other Instructions |
| 6. TANK(S) INVOLVED | Identify by Direction | Capacity | Brand/Supplier | Grade | Approx. Age |
| | #2 Center tank | 13000 | | Fuel oil | ? |
| | #4 | 6500 | | alcohol | ? |
| 7. INSTALLATION DATA | | Location | Cover | Fills | Vents |
| | | #2 inside drain | B/T | #3 = 4" | 3" |
| | | #4 Behind bldg. | B/T | #4 = 2" | |
| | | North inside driveway, Rear of station, etc. | Concrete, Black Top, Earth, etc. | Size, Titefill make, Drop tubes, Remote Fills | Size, Manifolds |
| 8. UNDERGROUND WATER | | Depth to the Water table | | | Is the water over the tank? |
| | | 20' | | | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| 9. FILL-UP ARRANGEMENTS | | Tanks to be filled | | 0600 hr. 7-27 | Date |
| | | Extra product to "top off" and run TSTT. | | How and who to provide? | Consider NO Lead. |
| | | Terminal or other contact for notice or inquiry | | Company | Name |
| 10. CONTRACTOR, MECHANICS, any other contractor involved | | ESTI ENGINEERING, INC. P. O. Box 10941 Bakersfield, CA 93389-0941 | | | |
| 11. OTHER INFORMATION OR REMARKS | | Additional information on any items above. Officials or others to be advised during test etc. | | | |
| 12. TEST RESULTS | | Tests were made on the above tank systems in accordance with as detailed on attached test charts with results | | prescribed for petrofile | |
| | | Tank Identification | Tight | Leakage | Date Tested |
| | | #2 Center tank | YES | - | 7-27 |
| | | #4 | YES | - | 7-27 |
| 13. CERTIFICATION | | This is to certify that these tank systems were tested on the date of 7-27-87 and indicated as "Tight" meet the criteria established by the National Fire Protection Association Pamphlet 329. | | | |
| 7-27-87 Date | | FRED McCLURE | | ESTI ENGINEERING, INC. P. O. Box 10941 Bakersfield, CA 93389-0941 | |

petroTite
WORK RESIST

| | | |
|--|---|--|
| 16. TANK TO TEST <u>#1 Tank</u> <small>Identify by number</small> <u>alcohol</u> <small>Identify by liquid</small> | 18. CAPACITY Nominal Capacity <u>1500</u> <small>Gallons</small> Is there doubt as to True Capacity? <input type="checkbox"/> See Section "DETERMINING TANK CAPACITY" | From <input type="checkbox"/> Station Chart <input type="checkbox"/> Tank Manufacturer's Chart <input type="checkbox"/> Company Engineering Data <input type="checkbox"/> Charts supplied with <u>petro file</u> <small>1-2-11-58</small> <input type="checkbox"/> Other _____ |
|--|---|--|

12. FILL-UP FOR TEST

Stick Water Bottoms before Fill-up to 14 in. Gallons

Inventory

| Stick Readings to 14 in. | Gallons | Total Gallons vs. Reading |
|--------------------------|-----------------------------|---------------------------|
| FUEL | <u> </u> | <u>16710</u> |
| WATER | <u> </u> | <u>95</u> |
| TOP OFF | <u> </u> | <u>+10</u> |
| | | <u>16720</u> |

Fill the stick before and after each compartment drop or each metered delivery quantity

Tank Diameter 96 Product in full tank (up to fill pipe)

18. SPECIAL CONDITIONS AND PROCEDURES TO TEST THIS TANK OBS API Gravity 49.0 Temp. 74 VAPOR RECOVERY SYSTEM
See manual sections applicable. Check below and record procedure in log (26).
Corr. API Gravity
☐ Water in tank ☐ High water table in tank excavation ☐ Line(s) being tested with LVLLT 43.7
☒ Stage 1 ☐ Stage 2

| | | | |
|--|--|--|--|
| 19. TANK MEASUREMENTS FOR 151T ASSEMBLY Station of tank to Grade <u>116</u> " " Add 30" for 4" L " " Add 24" for 3" L or oil seal <u>24</u> " Total tubing to assembly Approximate <u>140</u> " | | 21. TEMPERATURE/VOLUME FACTOR (a) TO TEST THIS TANK Is Tank Warmer? <input type="checkbox"/> Colder? <input type="checkbox"/> Product in Tank " Fill up Product on Truck " Expected Change (+ or -) " | |
| 20. EXTENSION HOSE SETTING Tank top to grade <u>20</u> " Extension hose on suction tube 6" or more " Below tank top <u>75</u> " | | 22. Thermit Sensor reading after circulation <u>17920</u> <u>76/77</u> ^{digits} | |
| | | 23. Digits per "F in range of expected change <u>351</u> ^{digits} | |
| | | 24. $\frac{6720}{\text{Total quantity in full tank (15 or 17)}} \times \frac{0055127}{\text{Coefficient of expansion for involved product}} = \frac{3.5365344}{\text{Volume change in this tank per "F}}$ gallons | |
| | | 25. $\frac{3.5365344}{\text{Volume change per "F (24)}} + \frac{351}{\text{Digits per "F in test Range (23)}} = \frac{1011017241}{\text{Volume change per digit. Compute to 4 decimal places.}}$ This is test factor (a) | |

| 26. LOG OF TEST PROCEDURE | | 30. HYDROSTATIC PRESSURE CONTROLS | | 31. VOLUME MEASUREMENTS (V) REDUCED TO AIR SAT. | | 34. TEMPERATURE CORRECTION FACTOR (W) | | 38. NET VOLUME CHANGES EACH READING | | 39. ACCUMULATED CHANGES | |
|---------------------------|---|-----------------------------------|-------------------------------|---|---------------|---------------------------------------|-------------------------------|--|----------------------------|---|-----------------------------------|
| 27. DATE | 28. Record details of setting up and running test. (Use full length of line if needed.) | 29. Timing in | 30. Standpipe level in inches | 32. Pressure in Gageheads | | 35. Thermal System Reading | 36. Change in (W) = (W) - (W) | 37. Correction (C) = (C) = Expansion + Contraction = | 38. Temperature Adjustment | 39. Change from record | 39. Accumulated Change |
| Time (hr) | | Beginning of Reading | Level to which Reduced | Before Reading | After Reading | Product Recovered (+) | | | | Volume Measured (C) in Correction (+) = (C) - (C) | Change per hour (C) in (C) in (C) |
| 10:00 | Arrive test location | | | | | | | | | | |
| 10:00 | Pump primed & running | | | | | | | | | | |
| 10:05 | 1st Sensor Reading | | 42.0 | | | | | | | | |
| 10:10 | Start HI level test | 1 | 42.0 | 300 | 700 | +100 | 918 | +2 | -0.22 | +0.78 | |
| 10:15 | Continued HI level test | 2 | 42.0 | 700 | 1610 | +076 | 916 | +2 | -0.22 | +0.68 | |
| 10:20 | | 3 | 42.0 | 1610 | 3300 | +070 | 915 | -1 | +0.11 | +0.69 | |
| 10:25 | | 4 | 42.0 | 3300 | 4600 | +070 | 915 | -1 | +0.11 | +0.70 | |
| 10:30 | | 5 | 42.0 | 4600 | 5300 | +046 | 916 | +1 | +0.11 | +0.51 | |
| 10:35 | | 6 | 42.0 | 5300 | 5300 | +040 | 916 | +0 | +0.10 | +0.40 | |
| 10:40 | | 7 | 42.0 | 5300 | 5300 | +040 | 917 | +1 | +0.11 | +0.51 | |
| 10:45 | | 8 | 42.0 | 5300 | 5300 | +040 | 918 | +1 | +0.11 | +0.41 | |
| 10:50 | | | | | | | | | | | |
| 10:55 | | | | | | | | | | | |
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| 14:40 | | | | | | | | | | | |
| 14:45 | | | | | | | | | | | |
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| 14:55 | | | | | | | | | | | |
| 15:00 | | | | | | | | | | | |
| 15:05 | | | | | | | | | | | |
| 15:10 | | | | | | | | | | | |
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|--|--------------------------|------|-------|---------------|
| Name of Equipment Owner or User | Address (No. and Street) | City | State | Date of Issue |
| <p>16. TANK TO TEST <u>450. T. Tank</u> <small>(Identify by number)</small> <u>101 and</u> <small>Serial and Grade</small></p> | | | | |
| <p>15. CAPACITY Nominal Capacity <u>12050</u> <small>Grades</small> Is there doubt as to True Capacity? <input type="checkbox"/> See Section "DETERMINING TANK CAPACITY"</p> | | | | |
| <p>By most accurate capacity chart available <u>11907</u> <small>Chart</small></p> | | | | |
| <p>1. <input type="checkbox"/> Station Chart <input type="checkbox"/> Tank Manufacturer's Chart <input type="checkbox"/> Company Engineering Data <input checked="" type="checkbox"/> Charts supplied with <u>petroleum</u> <input type="checkbox"/> Other</p> | | | | |

17. FILL-UP FOR TEST

Stick Water Bottoms before Fill-up 2 to 14 in. Gasoline Inventory

FILL-UP, STICK BEFORE AND AFTER EACH COMPARTMENT DROP OR EACH METERED DELIVERY QUANTITY

| Stick Readings to 14 in. | Gasoline | Total Gasoline on Reading |
|--------------------------|----------|---------------------------|
| FUEL | | 11907 |
| WATER | | -62 |
| TOP OFF | | +10 |
| | | 11855 |

Tank Diameter 76 Product in full tank (up to 18 pipe)

18. SPECIAL CONDITIONS AND PROCEDURES TO TEST THIS TANK OBS API Gravity 35.2 Temp. 74 VAPOR RECOVERY SYSTEM
See manual section applicable. Check below and record procedure in log (28).
Corr. API Gravity 34.2
☒ Water in tank ☐ High water table in tank excavation ☐ Line(s) being tested with LVLLT
☒ Stage I
☐ Stage II

| | | |
|--|--|---|
| <p>19. TANK MEASUREMENTS FOR TSTT ASSEMBLY</p> <p>Bottom of tank to Grade* <u>146</u> "</p> <p>Add 30" for 4" L <u>30</u> "</p> <p>Add 24" for 3" L or air seal <u>196</u> "</p> <p>Total tubing to assemble. Approximate <u>196</u> "</p> | <p>20. EXTENSION HOSE SETTING</p> <p>Tank top to grade* <u>50</u> "</p> <p>Extend hose on suction tube 1" for 1" hose <u>50</u> "</p> <p>Bottom tank top <u>50</u> "</p> | <p>21. TEMPERATURE/VOLUME FACTOR (a) TO TEST THIS TANK</p> <p>Is today warmer? () Colder? () _____ °F Product in Tank _____ °F Fill-up Product on Truck _____ °F Expected Change (+ or -) _____</p> |
| <p>22. Thermal Sensor reading after circulation <u>182.36</u> °F</p> | <p>23. Digits per °F in range of expected change <u>321</u> digits</p> | <p>24. <u>11855</u> X <u>00845490</u> = <u>5.3922395</u> gallons</p> <p>Total quantity in full tank (16 or 17) coefficient of expansion for involved product volume change in this tank per °F</p> |
| <p>*If Fill-up pipe extends above grade, use top of fill</p> | <p>25. <u>321</u> + <u>321</u> = <u>016800123</u> This is</p> <p>volume change per °F (24) Digits per °F in test Range (23) Volume change per digit. Compute to 4 decimal places. (24)</p> | <p>25. <u>321</u> + <u>321</u> = <u>016800123</u> This is</p> <p>volume change per °F (24) Digits per °F in test Range (23) Volume change per digit. Compute to 4 decimal places. (24)</p> |

[illegible]

DATA CHART FOR TANK SYSTEM TIGHTNESS TEST

petrofile

TANK TESTER

PLEASE PRINT

| 1. OWNER Property <input checked="" type="checkbox"/> Tank(s) <input checked="" type="checkbox"/> | ANDREW JEEGENS CO. Name: 99 W. Verdugo Ave. Burbank CA. 91503 Address: _____ Telephone: _____ Representative: _____ Telephone: _____ | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|----------------------------------|---|------------------|--------------|--|---------------------|-------|-------------------|-------------|----|-----|------|---------|--|--|--|--|--|--|--|--|--|--|--|--|
| 2. OPERATOR | Same Name: _____ Address: _____ Telephone: _____ | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. REASON FOR TEST (Explain Fully) | yearly mandated test | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. WHO REQUESTED TEST AND WHEN | AL Haig Name: _____ Title: _____ Company or Affiliation: _____ Date: _____ Address: _____ Telephone: _____ | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. WHO IS PAYING FOR THIS TEST? | Company, Agency or Individual: _____ Person Authorizing: _____ Title: _____ Telephone: _____ Billing Address: _____ City: _____ State: _____ Zip: _____ Attention of: _____ Order No.: _____ Other Instructions: _____ | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6. TANK(S) INVOLVED | Identify by Direction | Capacity | Brand/Supplier | Grade | Approx. Age | Steel/Fiberglass | | | | | | | | | | | | | | | | | | | | |
| | #1 inside | 12000 | | Fuel oil | | steel | | | | | | | | | | | | | | | | | | | | |
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| 7. INSTALLATION DATA | Location | Cover | Fills | Vents | Siphones | Pumps | | | | | | | | | | | | | | | | | | | | |
| | inside First Gate | concrete | 4" | 2" | none | Remote Red jacket | | | | | | | | | | | | | | | | | | | | |
| | North inside driveway, Rear of station, etc. | Concrete, Black Top, Earth, etc. | Size, Titefill make, Drop tubes, Remote Fills | Size, Manifolled | Which tanks? | Suction, Remote, Make it known | | | | | | | | | | | | | | | | | | | | |
| 8. SUBSURFACE | Depth to the Water table: 20'4" | | | | | Is the water over the tank? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | | | | | | | | | | | | | | | | | | |
| 9. FILL UP ARRANGEMENTS | Tanks to be filled 0700 hr. 7-23-87 Date Arranged by: _____ Name: _____ Telephone: _____ Extra product to "top off" and run TSTT. How and who to provide? Consider NO Lead. Terminal or other contact for notice or inquiry: _____ Company: _____ Name: _____ Telephone: _____ | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10. CONTRACTOR, EQUIPMENT, etc. | ESTI ENGINEERING, INC. P. O. Box 10941 Bakersfield, CA 93389-0941 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11. COMMENTS | Additional information on any items above. Officials or others to be advised when testing is in progress or completed. Visitors or observers present during test etc. | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12. TEST RESULTS | Tests were made on the above tank systems in accordance with test procedures prescribed for petrofile as detailed on attached test charts with results as follows: <table border="1"> <thead> <tr> <th>Tank Identification</th> <th>Tight</th> <th>Leakage Indicated</th> <th>Date Tested</th> </tr> </thead> <tbody> <tr> <td>#1</td> <td>YES</td> <td>+006</td> <td>7-23-87</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> | | | | | | Tank Identification | Tight | Leakage Indicated | Date Tested | #1 | YES | +006 | 7-23-87 | | | | | | | | | | | | |
| Tank Identification | Tight | Leakage Indicated | Date Tested | | | | | | | | | | | | | | | | | | | | | | | |
| #1 | YES | +006 | 7-23-87 | | | | | | | | | | | | | | | | | | | | | | | |
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| This is to certify that these tank systems were tested on the date(s) shown. Those indicated as "Tight" meet the criteria established the National Fire Protection Association Pamphlet 329. Technicians: FRED McCLURE ESTI ENGINEERING, INC. Fred McClure Testing Contractor or Company By: Signature P. O. Box 10941 Bakersfield, CA 93389-0941 Address: _____ | | | | | | | | | | | | | | | | | | | | | | | | | | |

17. FILL-UP FOR TEST

| | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|-------------------------|-----------------------------|-----------|---|------------------------------|---------|-----------------------------|------|--|--------------|-------|-----------|-------------|---------|--|-------------|--|--|--------------|
| Stick Water Bottom before Fill-up | <u>2"</u> to 1/4 in. | <u>62</u> Gallons | Inventory | <table border="0"> <tr> <td>Stick Readings to 1/4 in.</td> <td>Gallons</td> <td>Total Gallons on Reading</td> </tr> <tr> <td>FUEL</td> <td></td> <td><u>11907</u></td> </tr> <tr> <td>WATER</td> <td><u>62</u></td> <td><u>- 62</u></td> </tr> <tr> <td>TOP OFF</td> <td></td> <td><u>+ 10</u></td> </tr> <tr> <td></td> <td></td> <td><u>11855</u></td> </tr> </table> | Stick Readings to 1/4 in. | Gallons | Total Gallons on Reading | FUEL | | <u>11907</u> | WATER | <u>62</u> | <u>- 62</u> | TOP OFF | | <u>+ 10</u> | | | <u>11855</u> |
| Stick Readings to 1/4 in. | Gallons | Total Gallons on Reading | | | | | | | | | | | | | | | | | |
| FUEL | | <u>11907</u> | | | | | | | | | | | | | | | | | |
| WATER | <u>62</u> | <u>- 62</u> | | | | | | | | | | | | | | | | | |
| TOP OFF | | <u>+ 10</u> | | | | | | | | | | | | | | | | | |
| | | <u>11855</u> | | | | | | | | | | | | | | | | | |

Fill up STICK BEFORE AND AFTER EACH COMPARTMENT DROP OR EACH METERED DELIVERY QUANTITY

Tank Diameter 96 Product in full tank (up to fill pipe)

18. SPECIAL CONDITIONS AND PROCEDURES TO TEST THIS TANK OBS API Gravity 35.2 Temp. 74° VAPOR RECOVERY SYSTEM
See manual sections applicable. Check below and record procedure in log (28).
☒ Water in tank ☐ High water table in tank excavation ☐ Line(s) being tested with LVLT ☐ Stage I ☐ Stage II
34.2

| | | | |
|---|-----|---|--------------------------|
| 19. TANK MEASUREMENTS FOR TSTT ASSEMBLY | | 21. TEMPERATURE/VOLUME FACTOR (u) TO TEST THIS TANK | |
| Bottom of tank to Grade* | | Is Today Warmer? <input checked="" type="checkbox"/> Colder? <input type="checkbox"/> Product in Tank ____°F Temp. Product on Truck ____°F Expected Change (r or s) | |
| Add 30" for 4" L | 146 | 22. Thermal Sensor reading after circulation | 18360 78/79 |
| Add 24" for 3" L or air seal | 30 | 23. Digits per °F in range of expected change | 321 |
| Total tubing to assemble Approximate | 176 | 24. 11855 x 00045490 = 5.3928395 | gallons |
| 20. EXTENSION HOSE SETTING | | Total quantity in full tank (18 or 17) | |
| * Use top to grade" | 50 | coefficient of expansion for involved product | |
| Extend hose on such as tube 6" or more | 18 | volume change in this tank per °F | |
| Below tank top | | 25. 5.3928395 + 321 = 0.01680023 | This is total factor (a) |
| * If Fill pipe extends above grade, use top of fill | | Volume change per digit. Compute to 4 decimal places. | |

| 26. LOG OF TEST PROCEDURES | | 29. Standpipe Level in Inches | | 30. HYDROSTATIC PRESSURE CONTROL | | 31. FLOW MEASUREMENTS IN GALLONS PER HOUR | | | 34. TEMPERATURE COMPENSATION (2 INCHES IN) | | 38. NET VOLUMIC CHANGES EACH READING | | 39. ACCUMULATED CHANGE | | |
|----------------------------|------|---|------------|----------------------------------|-----------------------|---|----------------------|-----------------------|--|-----------------------------|--|------------------------|---|--|--|
| DATE | TIME | Procedure details of setting up and running test. (Show full length of line if record.) | Reading in | Beginning of Reading | Level in which Placed | Product in Cretosols | Product Expelled (-) | Product Recovered (+) | Thermal Sensor Reading | Charge Higher + Lower - (4) | Completion (3) = (4) = Expansion + Contraction - | Temperature Adjustment | Volume Change Expansion (+) or Contraction (-) = (3)(4) - (+)(1)(1) | At High Level minus Total Test Corrections | At Low Level minus Change per foot (27.9 inches) |
| 0700 | | Arrive test location | | | | | | | | | | | | | |
| 0730 | | Pump primed & running | | | | | | | | | | | | | |
| 0900 | | 1st Sensor Reading | | | 42.0 | | | | 360 | | | | | | |
| 0915 | | Start Hi level test | 1 | 42.0 | 42.0 | 420 | 420 | +000 | 362 | +2 | +034 | -034 | | | |
| 0930 | | Continued Hi level test | 2 | 42.0 | 42.0 | 420 | 420 | +000 | 364 | +2 | +034 | -034 | | | |
| 0945 | | | 3 | 42.0 | 42.0 | 420 | 420 | +000 | 366 | +2 | +034 | -034 | | | |
| 1000 | | | 4 | 42.0 | 42.0 | 420 | 420 | +000 | 370 | +2 | +034 | -034 | | | |
| 1015 | | | 5 | 42.0 | 42.0 | 420 | 420 | +000 | 372 | +2 | +034 | -034 | | | |
| 1030 | | | 6 | 42.0 | 42.0 | 420 | 420 | +000 | 375 | +2 | +034 | -034 | | | |
| 1045 | | | 7 | 42.1 | 42.0 | 420 | 425 | +005 | 375 | +2 | +034 | -034 | | | |
| 1100 | | | 8 | 42.1 | 42.0 | 425 | 435 | +010 | 385 | +2 | +034 | -034 | | | |
| 1100 | | Drop to 12" low level | | | 12.0 | | | | 320 | | | | | | |
| 1115 | | Start low level test | 1 | 14.0 | 12.0 | 200 | 340 | +140 | 385 | +2 | +034 | -034 | | | |
| 1130 | | Continued low level test | 2 | 13.3 | 12.0 | 340 | 410 | +070 | 391 | +2 | +034 | -034 | | | |
| 1145 | | | 3 | 13.2 | 12.0 | 410 | 475 | +065 | 395 | +2 | +034 | -034 | | | |
| 1200 | | | 4 | 13.0 | 12.0 | 475 | 530 | +055 | 395 | +2 | +034 | -034 | | | |
| 1215 | | | 5 | 13.0 | 12.0 | 530 | 585 | +055 | 405 | +2 | +034 | -034 | | | |
| T-S SER# 1741 | | | | | | | | | | | | | | | |
| Tech Fred Snodgrass | | | | | | | | | | | | | | | |
| CER# 414811421 | | | | | | | | | | | | | | | |

Data Chart for Tank System Tightness Test

petrofile
TANK TESTER

PLEASE PRINT

| | | | | | | | | | | | | | | | | | | | | | |
|---|--|--------------------------|--|--------------------------|------------------------------|----------------------------------|---------------------|--|--|--|--|--|--|----------------------------|-----------------------------|--|--|--|--|--|--|
| 1. OWNER <small>Prop. only</small> <input checked="" type="checkbox"/> | Name <u>Andrew. JERGEN'S CO.</u> Address <u>99 W. VERDUGO - Burbank CA</u> Representative <u>AL Haig</u> Telephone _____ Name _____ Address _____ Representative _____ Telephone _____ | | | | | | | | | | | | | | | | | | | | |
| 2. OPERATOR | Name <u>Same</u> Address _____ Telephone _____ | | | | | | | | | | | | | | | | | | | | |
| 3. REASON FOR TEST (Explain Fully) | <u>state mandated tankly test</u> | | | | | | | | | | | | | | | | | | | | |
| 4. WHO REQUESTED TEST AND WHEN | Name <u>AL Haig</u> Title _____ Company or Affiliation _____ Date _____ Address _____ Telephone _____ | | | | | | | | | | | | | | | | | | | | |
| 5. WHO IS PAYING FOR THIS TEST? | Company, Agency or Individual _____ Person Authorizing _____ Title _____ Telephone _____ Billing Address _____ City _____ State _____ Zip _____ Attention of: _____ Order No. _____ Other Instructions _____ | | | | | | | | | | | | | | | | | | | | |
| 6. TANK(S) INVOLVED | Identify by Direction <u>#3 outside</u> | Capacity <u>12000</u> | Brand/Supplier <u>P</u> | Grade <u>fuel oil</u> | Approx. Age <u>15 yrs</u> | Steel/Fiberglass <u>Steel</u> | | | | | | | | | | | | | | | |
| 7. INSTALLATION DATA | Location North inside driveway, Rear of station, etc. | Cover <u>concrete</u> | Fills Size, Tefill make, Drop tubes, Remote Fills | Vents <u>3"</u> | Siphones <u>none</u> | Pumps <u>1"</u> | | | | | | | | | | | | | | | |
| 8. UNDERGROUND WATER | Depth to the Water table <u>30'</u> Is the water over the tank? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | | | | | | | | | | | | | | | | | | |
| 9. FILL-UP ARRANGEMENTS | Tanks to be filled <u>100</u> hr. <u>4-31-87</u> Date Arranged by <u>AL Haig</u> Name _____ Telephone _____ Extra product to "top off" and run TSTT. How and who to provide? Consider NO Lead. <u>JERGEN'S is supplying top off</u> Terminal or other contact for notice or inquiry _____ Company _____ Name _____ Telephone _____ | | | | | | | | | | | | | | | | | | | | |
| 10. CONTRACTOR, MECHANICS, any other contractor involved | <u>ESTI ENGINEERING, INC.</u> <u>P. O. Box 10941</u> <u>Bakersfield, CA 93389-0941</u> | | | | | | | | | | | | | | | | | | | | |
| 11. OTHER INFORMATION OR REMARKS | Additional information on any items above, OHS during test etc. _____ advised when testing is in progress or completed. Visitors or observers _____ | | | | | | | | | | | | | | | | | | | | |
| 12. TEST RESULTS | Tests were made on the above tank system as detailed on attached _____ <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"> Tank Identification <u>#3</u> </td> <td style="width: 50%;"> Tight <u>YES</u> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table> With test procedures prescribed for _____ results as follows: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"> Age Indicated <u>16</u> </td> <td style="width: 50%;"> Date Tested <u>7-31-</u> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table> | | | | | Tank Identification <u>#3</u> | Tight <u>YES</u> | | | | | | | Age Indicated <u>16</u> | Date Tested <u>7-31-</u> | | | | | | |
| Tank Identification <u>#3</u> | Tight <u>YES</u> | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| Age Indicated <u>16</u> | Date Tested <u>7-31-</u> | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| 13. CERTIFICATION <u>7-31-87</u> <u>1003</u> | This is to certify that these tank systems were tested by the National Fire Protection Association _____ <u>ESTI ENGINEERING, INC.</u> Testing Contractor or Company By: <u>ESTI</u> Signature _____ Box 10941 Bakersfield, CA 93389-0941 | | | | | | | | | | | | | | | | | | | | |

| | | |
|---|---|--|
| <p>16. TASK TO TEST</p> <p># <u>3 outside tank</u></p> <p><u>Fuel oil</u></p> <p>Identify by process _____</p> <p>Sample in the tanks _____</p> | <p>18. CAPACITY</p> <p>Normal Capacity <u>12000'</u></p> <p>By most accurate capacity chart available <u>11907</u></p> <p>Is there doubt as to True Capacity? <input type="checkbox"/></p> <p>See Section "DETERMINING TANK CAPACITY"</p> | <p>1. Name _____</p> <p><input type="checkbox"/> Station Chart</p> <p><input type="checkbox"/> Tank Manufacturer's Chart</p> <p><input type="checkbox"/> Company Engineering Data</p> <p><input checked="" type="checkbox"/> Charts supplied with <u>11907</u></p> <p><input type="checkbox"/> Other _____</p> |
|---|---|--|

17. FILL-UP FOR TEST

| | | | | | | | |
|--------------------|-----------|--|---------|-----------|-----------------------------|---------|-----------------------------|
| Stick Water Bottom | <u>10</u> | Lo % gal. | Gallons | Inventory | Stick Readings Lo % gal. | Gallons | Total Gallons on Reading |
| Leture Fill-up | <u>10</u> | Lo % gal. | Gallons | | FUEL | | <u>11921</u> |
| | | | | | WATER | | <u>8</u> |
| | | | | | TOP OFF | | <u>110</u> |
| Tank Diameter | <u>16</u> | Product in full tank (up to fill pipe) | | | | | <u>11917</u> |

FILL-UP, STICK BEFORE AND AFTER EACH COMPARTMENT DPOP OR EACH METERED DELIVERY QUANTITY

18. SPECIAL CONDITIONS AND PROCEDURES TO TEST THIS TANK OBS API Gravity 56.0 Temp. 78° VAPOR RECOVERY SYSTEM
See manual sections applicable. Check below and record procedure in log (28).
Corr. API Gravity 34.6
☐ Water in tank ☐ High water table in tank excavation ☐ Line(s) being tested with LVLVT
☒ Stage 1 ☐ Stage 2

| | | | |
|--|-----|---|-------------------|
| 19. TANK MEASUREMENTS FOR TEST ASSEMBLY | | 21. TEMPERATURE/VOLUME FACTOR (a) TO TEST THIS TANK | |
| Bottom of Tank to Grade*..... | | Is Today Warmer? <input type="checkbox"/> Colder? <input type="checkbox"/> Product in Tank _____°F Fill up Product on Truck _____°F Expected Change: + or - | |
| Add 20" for 4" L..... | 140 | 22. Thermal Sensor reading after circulation | 18572 79/80 |
| Add 24" for 5" L on air seal..... | 30 | 23. Digits per °F in range of expected change | 318 |
| Total tubing to assemble. Approximate..... | 170 | 24. Total quantity in full tank (18 or 17) x 23.45670 | 5.4424939 gallons |
| 20. EXTENSION HOSE SETTING | | 25. volume change per digit | |
| Tank top to grade*..... | 44 | 318 | |
| Extend hose on bottom tube 8" or more | 112 | 0.1711476 This is test factor (a) | |
| Volume tank top..... | | | |
| *If 5/8 pipe extend above grade, use top of fill | | | |

| 26. LOG OF TEST PROCEDURE | | 30. HYDROSTATIC PRESSURE CONTROLS | | 31. VOLUME MEASUREMENTS (NO FILLER IN HT GALL) | | 34. TEMPERATURE CORRECTIONS (C/F FACTOR IS .0171) | | 38. NET VOLUME CHANGES EACH READING | | 39. ACCUMULATED CHANGE | |
|---------------------------|--|-----------------------------------|---|--|--|---|---|-------------------------------------|---------------------------|--|---|
| 27. DATE | 28. Record details of setting up or changing test. (Use full length of line if desired.) | 29. Reading No. | Station Level in inches Beginning of Reading | Level at which Paused | Product In Cords Before Pausing After Pausing | | Product Replaced (-) Product Recovered (+) | 35. Thermal Screen Reading | 36. Change in (low - [H]) | 37. Compensation [(+) + (-) = Expansion - Contraction =] | Temperature Adjustment Expansion Multiplier (e.g., 0.32)(%) = e 32(%) - e 31(%) At High Level record Total End Substructure At Low Level compute Change per Foot (e.g., 0.016) |
| | Arrive test location | | | | | | | | | | |
| | Pump primed & running | | | | | | | | | | |
| | 1st Sensor Reading | | 42.0 | | | | | 572 | | | |
| | Start Hi level test | 1 | 410.9 | 42.0 | 550 | 510 | +070 | 572 | +0 | +000 | -070 |
| | Continued Hi level test | 2 | 411.0 | 42.0 | 510 | 450 | +060 | 574 | +2 | +034 | -094 |
| | | 3 | 411.2 | 42.0 | 450 | 400 | +050 | 576 | +2 | +034 | -084 |
| | | 4 | 411.2 | 42.0 | 400 | 350 | +050 | 578 | +2 | +034 | -084 |
| | | 5 | 411.3 | 42.0 | 350 | 300 | +030 | 582 | +4 | +068 | -098 |
| | | 6 | 411.3 | 42.0 | 300 | 250 | +030 | 586 | +4 | +068 | -098 |
| | | 7 | 411.3 | 42.0 | 250 | 200 | +030 | 589 | +3 | +051 | -081 |
| | | 8 | 411.3 | 42.0 | 200 | 150 | +030 | 592 | +3 | +051 | -081 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | Drop to 12" low level | | 12.0 | | | | | 592 | | | |
| | start low level test | 1 | 13.1 | 12.0 | 130 | 200 | +070 | 594 | +2 | +034 | +036 |
| | Continued low level test | 2 | 12.6 | 12.0 | 200 | 235 | +035 | 596 | +2 | +034 | +001 |
| | | 3 | 12.5 | 12.0 | 235 | 265 | +030 | 598 | +2 | +034 | -003 |
| | | 4 | 12.5 | 12.0 | 265 | 295 | +030 | 600 | +2 | +034 | -007 |
| | | 5 | 12.3 | 12.0 | 295 | 320 | +025 | 602 | +2 | +034 | -016 |

TEST SEE 1878

tech O. Mordine

SERIAL 811421

APPENDIX 3

SITE DRAWINGS

ANDREW JERGENS CO. - RUBBANK
SITE PLAN A-1

VERDUGO AVE.



R. R.

ETHYL ALCOHOL TK.

STAIRS

BLDG. 4
(1920)

BLDG. 3
(1920)

BLDG. 2
(1920)

BLDG. 1
(1920)

BLDG. 16
(1959)

STAIRS

BLDG. 6
(1920)

BLDG. 17
(1982)

BLDG. 11
(1937)

STAIRS

STAIRS

STAIRS

BLDG. 7
(1920)

(1920)

BLDG. 8

CLARIFIER

DIKE

FUEL OIL TKS.

PW

TRANS-
FORMERS

BOILER
SUMP

PW
B

PW
P

MAINTENANCE

FLOWER STREET

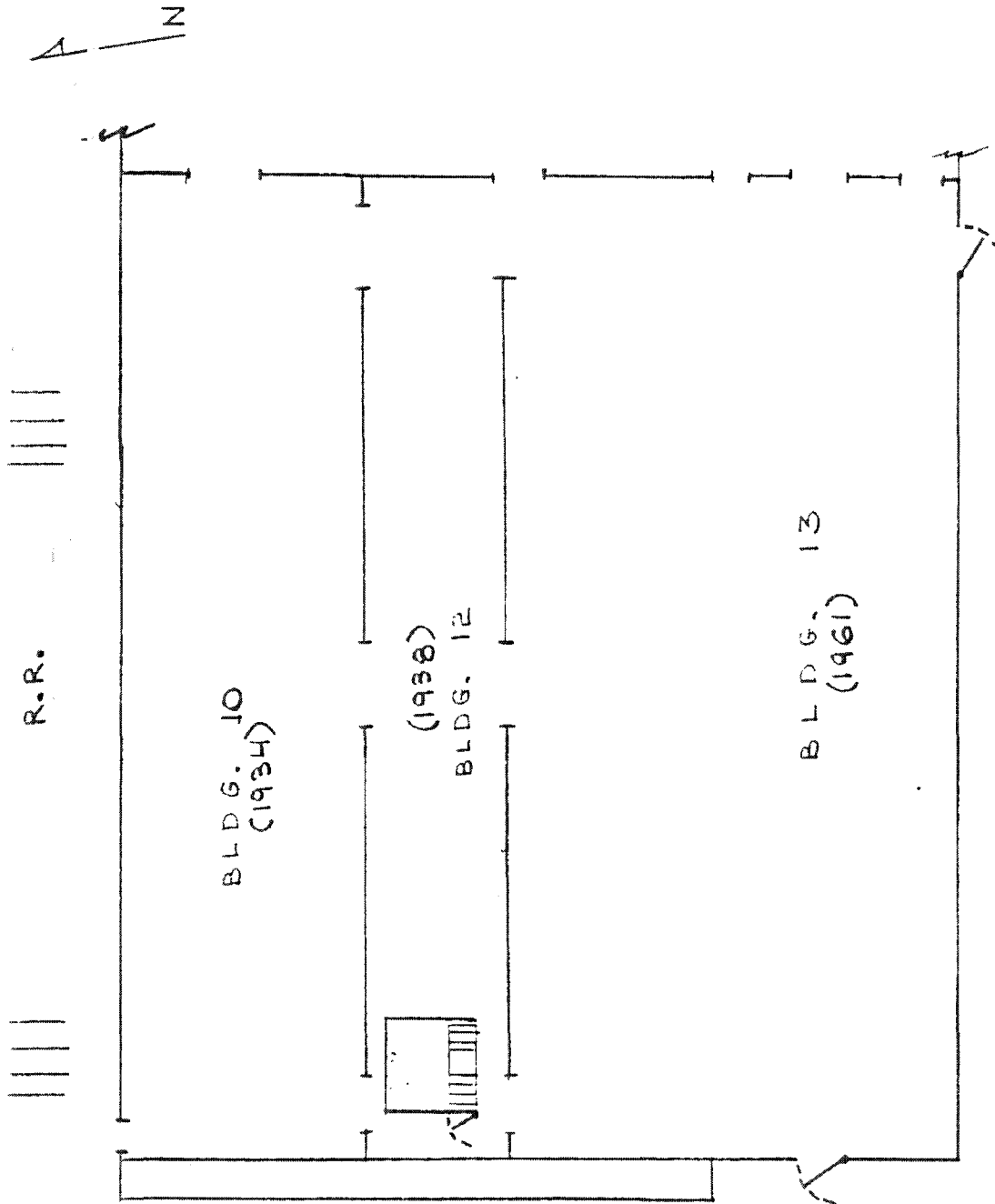
PLAN A.1

⊗ PROPOSED WELL (PW)

SEE
PLAN B.1

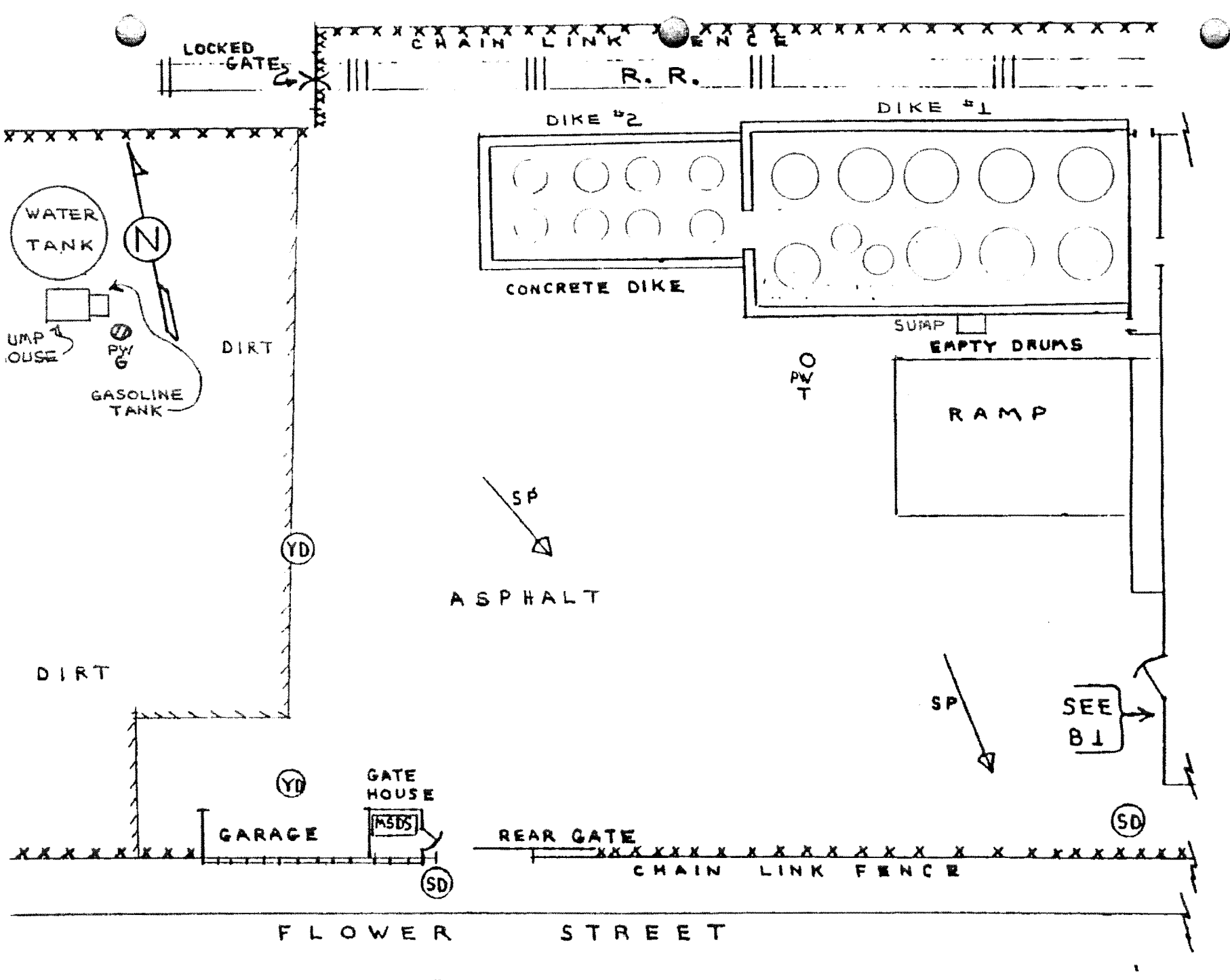
ANDREW JERGENS CO. - BURBANK

SITE PLAN B-1



FLOWER STREET

SEE PLAN C1
PLAN B1



PLAN C-1

○ PROPOSED WELL (PW)

ANDREW JERGENS CO. - BUREAU
SITE PLAN C-1

APPENDIX 4

WASTE WATER TEST RESULTS

ENSOTECH, INC.
7949 AJAY DRIVE
SUN VALLEY, CA 91352
(818) 767-2222

ANALYTICAL REPORT

Date Sampled: 6/13/89

Date Analyzed: 6/16/89

Date Submitted: 6/14/89

Lab No. E-093 Ref No.

CLIENT: The Andrew Jergens Company
99 W. Verdugo Ave.
Burbank, CA 91502

SAMPLE: 24 hour wastewater composite (Quarterly sample)

INVESTIGATION:

FLOW (Total): 88,078 gals/day

R E S U L T S

| PARAMETER (a) | AMOUNT | UNIT | |
|--------------------------------------|--------|------|--|
| Aluminum-total | | mg/L | |
| Ammonia-N | | mg/L | |
| Antimony-total | | mg/L | |
| Arsenic-total | | mg/L | |
| BOD | 121 | mg/L | |
| Boron-total | | mg/L | |
| Cadmium-total | | mg/L | |
| Chlorides | 153 | mg/L | |
| Chlorinated Hydrocarbons | | mg/L | |
| Chromium-total | | mg/L | |
| Chromium-hexavalent | | mg/L | |
| CDD | 220 | mg/L | |
| Copper-total | | mg/L | |
| Cyanide-total | | mg/L | |
| Cyanide-free | | mg/L | |
| Fluoride | | mg/L | |
| Iron-total | | mg/L | |
| Lead-total | | mg/L | |
| Mercury-total | | mg/L | |
| Nickel-total | | mg/L | |
| Nitrate | | mg/L | |
| Oil & Grease (liquid-liquid extract) | 34 | mg/L | |

| PARAMETER (a) | AMOUNT | UNIT | |
|------------------------------|--------|-------|--|
| Pesticides-total | | mg/L | |
| pH | 7.5 | units | |
| Phenols-total | | mg/L | |
| Phosphate | | mg/L | |
| Radioactivity-gross alpha | | pCi/L | |
| Radioactivity-gross beta | | pCi/L | |
| Selenium-total | | mg/L | |
| Silver-total | | mg/L | |
| Sodium | | mg/L | |
| Specific Conductivity | | umhos | |
| Sulfate | 176 | mg/L | |
| Sulfide | | mg/L | |
| Surfactants (MBAS) | 0.4 | mg/L | |
| SS (suspended solids) | 86 | mg/L | |
| Temperature | | deg F | |
| Titanium-total | | mg/L | |
| TDS (total dissolved solids) | 660 | mg/L | |
| TOO (total toxic organics) | | mg/L | |
| Zinc-total | | mg/L | |
| | | | |
| | | | |
| | | | |

Bob Moezzi
Bob Moezzi
Lab Supervisor

Analyst

EMSOTECH, INC.
7949 AJAY DRIVE
SUN VALLEY, CA 91352
(818) 767-2222

ANALYTICAL REPORT

Date Sampled: 9/19/89

Date Analyzed: 9/22/89

Date Submitted: 9/20/89

Lab No. F-880 Ref No.

CLIENT: The Andrew Jergens Company
99 W. Verdugo Ave.
Burbank, Ca. 91502

SAMPLE: 24 hour wastewater composite (Quarterly sample)

INVESTIGATION:

FLOW (Total): 87,118 gals/day

R E S U L T S

| PARAMETER (a) | AMOUNT | UNIT |
|--------------------------------------|--------|------|
| Aluminum total | | mg/L |
| Ammonia N | | mg/L |
| Antimony total | | mg/L |
| Arsenic total | | mg/L |
| BOD | 124 | mg/L |
| Boron total | | mg/L |
| Cadmium total | | mg/L |
| Chlorides | 248 | mg/L |
| Chlorinated Hydrocarbons | | mg/L |
| Chromium total | | mg/L |
| Chromium hexavalent | | mg/L |
| COD | 225 | mg/L |
| Copper total | | mg/L |
| Cyanide total | | mg/L |
| Cyanide free | | mg/L |
| Fluoride | | mg/L |
| Iron total | | mg/L |
| Lead total | | mg/L |
| Mercury total | | mg/L |
| Nickel total | | mg/L |
| Nitrate | | mg/L |
| Oil & Grease (liquid liquid extract) | 101 | mg/L |

| PARAMETER (a) | AMOUNT | UNIT |
|------------------------------|--------|-------|
| Pesticides total | | mg/L |
| pH | 6.9 | units |
| Phenols total | | mg/L |
| Phosphate | | mg/L |
| Radioactivity gross alpha | | pCi/L |
| Radioactivity gross beta | | pCi/L |
| Selenium total | | mg/L |
| Silver total | | mg/L |
| Sodium | | mg/L |
| Specific Conductivity | | umhos |
| Sulfate | 221 | mg/L |
| Sulfide | | mg/L |
| Surfactants (MBAS) | | mg/L |
| SS (suspended solids) | 134 | mg/L |
| Temperature | | deg f |
| Titanium total | | mg/L |
| TDS (total dissolved solids) | 554 | mg/L |
| TOC (total organic carbon) | | mg/L |
| TOC (total organic carbon) | | mg/L |
| Zinc total | | mg/L |

Bob Moezzi
Bob Moezzi
Lab Supervisor

Analyst

ENSOTECH, INC.
7949 AJAY DRIVE
SUN VALLEY, CA 91352
(818) 767-2222

ANALYTICAL REPORT

Date Sampled: 12-13-89

Date Analyzed: 12-22-89

Date Submitted: 12-14-89

Lab No. G-695 Ref No.

CLIENT: The Andrew Jergens Company
99 W. Verdugo Ave.,
Burbank, CA. 91502

SAMPLE: 24 hour wastewater composite (Quarterly sample)

INVESTIGATION:

FLOW (Total): gals/day

RESULTS

| PARAMETER (a) | AMOUNT | UNIT | |
|------------------------------------|--------|------|--|
| Aluminum-total | | mg/L | |
| Ammonia-N | | mg/L | |
| Antimony-total | | mg/L | |
| Arsenic-total | | mg/L | |
| BOD | 524 | mg/L | |
| Boron-total | | mg/L | |
| Cadmium-total | | mg/L | |
| Chlorides | 235 | mg/L | |
| Chlorinated Hydrocarbons | | mg/L | |
| Chromium-total | | mg/L | |
| Chromium hexavalent | | mg/L | |
| COD | 920 | mg/L | |
| Copper-total | | mg/L | |
| Cyanide-total | | mg/L | |
| Cyanide free | | mg/L | |
| Fluoride | | mg/L | |
| Iron-total | | mg/L | |
| Lead-total | | mg/L | |
| Mercury-total | | mg/L | |
| Nickel-total | | mg/L | |
| Nitrate | | mg/L | |
| O & Grease (liquid liquid extract) | 110 | mg/L | |

| PARAMETER (a) | AMOUNT | UNIT | |
|------------------------------|--------|-------|--|
| Pesticides-total | | mg/L | |
| pH | 6.7 | units | |
| Phenols-total | | mg/L | |
| Phosphate | | mg/L | |
| Radioactivity gross alpha | | pCi/L | |
| Radioactivity gross beta | | pCi/L | |
| Selenium-total | | mg/L | |
| Silver-total | | mg/L | |
| Sodium | | mg/L | |
| Specific Conductivity | | umhos | |
| Sulfate | 225 | mg/L | |
| Sulfide | | mg/L | |
| Surfactants (MBAS) | 0.3 | mg/L | |
| SS (suspended solids) | 38 | mg/L | |
| Temperature | | deg F | |
| Titanium-total | | mg/L | |
| TDS (total dissolved solids) | 726 | mg/L | |
| TTD (total toxic organics) | | mg/L | |
| Zinc-total | | mg/L | |
| | | | |
| | | | |
| | | | |

Bob Moezzi
Lab Supervisor

Analyst

ENSOTECH, INC.
7049 AJAY DRIVE
SUN VALLEY, CA 91352
(318) 767-2222

ANALYTICAL REPORT

Date Sampled: 3-20-90

Date Analyzed: _____

Date Submitted: 3-21-90

Lab No. H-891 Ref No. _____

CLIENT: The Andrew Jergens Company
99 W. Verdugo Ave.,
Burbank, CA 91502

SAMPLE: 24 hour wastewater composite (Quarterly)

INVESTIGATION:

FLOW (Total): _____ gals/day

RESULTS

| PARAMETER (a) | AMOUNT | UNIT |
|--------------------------------------|--------|------|
| Aluminum-total | | mg/L |
| Ammonia-N | | mg/L |
| Antimony-total | | mg/L |
| Arsenic-total | | mg/L |
| BOD | 488 | mg/L |
| Boron-total | | mg/L |
| Cadmium-total | | mg/L |
| Chlorides | 220 | mg/L |
| Chlorinated Hydrocarbons | | mg/L |
| Chromium-total | | mg/L |
| Chromium hexavalent | | mg/L |
| COD | 650 | mg/L |
| Copper-total | | mg/L |
| Cyanide-total | | mg/L |
| Cyanide free | | mg/L |
| Fluoride | | mg/L |
| Iron-total | | mg/L |
| Lead-total | | mg/L |
| Mercury-total | | mg/L |
| Nickel-total | | mg/L |
| Nitrate | | mg/L |
| Oil & Grease (liquid liquid extract) | 54 | mg/L |

| PARAMETER (a) | AMOUNT | UNIT |
|------------------------------|--------|-------|
| Pesticides-total | | mg/L |
| pH | 8.1 | units |
| Phenols-total | | mg/L |
| Phosphate | | mg/L |
| Radioactivity gross alpha | | pCi/L |
| Radioactivity gross beta | | pCi/L |
| Selenium-total | | mg/L |
| Silver-total | | mg/L |
| Sodium | | mg/L |
| Specific Conductivity | | umhos |
| Sulfate | 236 | mg/L |
| Sulfide | | mg/L |
| Surfactants (MBAS) | | mg/L |
| SS (suspended solids) | 252 | mg/L |
| Temperature | | deg F |
| Titanium-total | | mg/L |
| TDS (total dissolved solids) | 616 | mg/L |
| TTO (total toxic organics) | | mg/L |
| Zinc-total | | mg/L |

Bob Moezzi
Lab Supervisor

S. Lankes
Analyst

ENSOTECH INC.**ANALYTICAL REPORT**

1525 SEPULVEDA BOULEVARD

LOS ANGELES, CALIFORNIA 90025

Phone: (213) 479-6630

Date Sampled 3/23/77Date Analyzed 3/29/77Date Submitted 3/24/77Lab. No. M-914 Ref. No. _____**CLIENT:**Andrew Jergens
99 West Verdugo Avenue
Burbank, California 91502**SAMPLE:**

Wastewater

INVESTIGATION:

Chemical Analysis

R E S U L T S

| | | | | | | | | |
|---|------------------------|----|---------|-----------|----|--|----|---------------|
| A | Flow (Total) | | 34,416 | gals/day | V | Manganese - Total | | mg/l |
| B | Flow (Peak) | | 55 | gals/min. | W | Mercury - Total | | 0.00005 mg/l |
| C | COD | | 1430 | mg/l | X | Molybdenum - Total | | mg/l |
| D | SS (Suspended Solids) | | 298 | mg/l | Y | Nickel - Total | ND | < 0.1 mg/l |
| E | pH | | 10.0 | Units | Z | Selenium - Total | ND | < 0.01 mg/l |
| F | Total Dissolved Solids | | 780 | mg/l | AA | Silver - Total | ND | < 0.1 mg/l |
| G | Ammonia (N) | | | mg/l | BB | Sodium - Total | | mg/l |
| H | Sulfide | | | mg/l | CC | Thallium - Total | | mg/l |
| I | Cyanide | ND | < 0.01 | mg/l | DD | Tin - Total | ND | 0.01 mg/l |
| J | Fluoride | ND | | mg/l | EE | Titanium - Total | | mg/l |
| K | Aluminum - Total | | | mg/l | FF | Zinc - Total | | 0.456 mg/l |
| L | Antimony - Total | | | mg/l | GG | Oil & Grease (Hexane Extract) | | 13.2 mg/l |
| M | Arsenic - Total | ND | < 0.001 | mg/l | HH | Phenols | | 1.2 mg/l |
| N | Beryllium - Total | | | mg/l | II | Surfactants (MBAS) | | mg/l |
| O | Boron - Total | | | mg/l | JJ | Chlorinated Hydrocarbons (except pesticides) | | 0.0025 mg/l |
| P | Cadmium - Total | ND | < 0.1 | mg/l | KK | Pesticides (Chlor. Hycarb.) | | mg/l |
| Q | Chromium - Total | | 0.238 | mg/l | LL | Radioactivity (Alpha, Beta & Gamma) | | pCi/l |
| R | Cobalt - Total | | | mg/l | MM | Temperature | | 71 Degrees °F |
| S | Copper - Total | | 0.096 | mg/l | NN | Color | | Units |
| T | Iron - Total | | | mg/l | OO | Thiosulfate (S) | | mg/l |
| U | Lead - Total | ND | < 0.1 | mg/l | | | | |
| | Hexavalent Chromium | ND | | | | | | |
| | BOD | | 475 | mg/l | | Specific Conductivity | | µmhos |
| | Sulfate | | 20 | | | | | |
| | Chloride | | 118.8 | mg/l | | | | |

